BIBLIOGRAPHY OF NEW ZEALAND APICULTURE



by Murray Reid Andrew Matheson Grahame Walton

New Zealand Ministry of Agriculture and Fisheries

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By:

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INTRODUCTION

The Bibliography of New Zealand Apiculture is a reference to almost all the material that has ever been published about New Zealand apiculture. It will be useful for people interested in New Zealand beekeeping, or anyone who wants to refer to the many items published on this subject.

Scope

This publication includes over 1,350 references, from 1842 to 1986 inclusive. It covers all research articles, and all extension articles which either offer new material or review the current or past positions.

We have not included articles on introductory beekeeping and monthly or seasonal notes. Published extension material that has become completely outdated has been excluded unless of particular historical significance. Newspaper articles and most localized pamphlets have also not been included.

The term "apiculture" in this context covers the honey bee and all aspects of beekeeping. Also included in the bibliography are significant references to other social and some sub-social bees, and pollination.

Arrangement

The subject headings used are listed on the contents pages. These generally follow the Universal Decimal Classification (UDC) system used by the International Bee Research Association's Apicultural Abstracts.

Within each subject grouping references are listed alphabetically by author, and an author index is provided for quick reference. The index lists articles under the name of the first author only.

Citation

Each reference is cited in full, and where articles have been published more than once, full references are given. Any articles that have been summarized in Apicultural Abstracts have the reference number listed after the citation. The notation 724/87, for instance, indicates that the relevant abstract is number 724 in the 1987 volume of Apicultural Abstracts. Reference numbers containing the letter 'L', for instance 197L/85, indicate that the publication is listed in Apicultural Abstracts by title only.

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(a) BOOKS AND BULLETINS

- ADVISORY SERVICES DIVISION. 1974. Starting with bees. A regional publication issued by New Zealand Ministry of Agriculture and Fisheries at Hamilton, Tauranga, Palmerston North, Nelson, Christchurch, Oamaru and Gore. Approximately 25pp.
- BAINES, F.C. 1920. Beekeeping for beginners. National Beekeepers' Association of New Zealand, 42 pp.
- CHAPMAN, G.T. 1867. How to manage the honey bee in New Zealand. 67pp. (Revised in 1870 by Hawkins, H.J. and Hay, D.).
- CHAPMAN-TAYLOR, R.; DAVEY, I. 1981. Beekeeping for fun. A handbook for New Zealand amateurs. Auckland, Ray Chapman-Taylor and Ivo Davey, 222 pp. 91 L/82.
- COTTON, W.C. 1848. A manual for New Zealand beekeepers. R. Stokes, Wellington. 112 pages (Facsimile reprint of 1st edition by Newrick Associates, Auckland 1976. 115 pp).
- COTTON, W.C. 1849. Ko nga pi; me nga tikanga mo te tiaka i a ratou, mo te maninga i to ratou honi, i to ratou ware. St Johns College Press, Auckland, 21 pp.
- EARP, E.A. 1926. Beekeeping. Wellington New Zealand, Department of Agriculture, Bulletin No.128. 104 pages (replaced Bulletin No. 55).
- HOPKINS, I. 1881, The illustrated New Zealand bee manual. Champtaloup and Cooper, Auckland. 148 pp. (second edition 1882:148pp)
- HOPKINS, I. 1886. The illustrated Australasian bee manual. I. Hopkins, Auckland. Third edition: 335 pp.
- HOPKINS, I. 1897. Scientific bee culture. In Leys, T.W.(ed). Brett's colonists' guide and cyclopaedia of useful knowledge. Auckland, Brett.
- HOPKINS, I. 1905. Bee-culture. N.Z. Department of Agriculture, Bulletin No.5. 30 pp.

- HOPKINS, I. 1906, 1911. The illustrated Australasian bee manual. Gordon and Gotch, Auckland, Wellington. Fourth edition 1906 : 162 pp; fifth edition 1911:173 pp.
- HOPKINS, I. 1907, 1909. Bee-culture. New Zealand Department of Agriculture, Bulletin No. 18. 34 pages. Second edition 1907 : 34 pp; third edition 1909:79 pp.
- HOPKINS, I. 1926. Practical beekeeping. (Sixth edition of "The Illustrated Australasian bee manual".) Whitcombe and Tombs, Auckland. 288 pp.
- IRVING, J. 1881. The New Zealand ABC of beekeeping for beginners. J.M. Thompson, Christchurch. 31 pp.
- JACOBSEN, F.A.; WESTBROOKE, G.V.; EARP,A. 1920. Bee-culture. New Zealand Department of Agriculture, Bulletin No. 55 (new series). Revised edition 83 pp.
- JACOBSEN, F.A.;WESTBROOKE, G.V.; EARP, E.A.; BOWMAN, L. 1915. Bee-culture. New Zealand Department Agriculture., Bulletin No. 55 (new series). 80 pp.
- MATHESON, A.G. 1984. Practical beekeeping in New Zealand. Wellington. Government Printer. 185 pp. 844/85
- MURPHY, M. (ca 1885). Hints for bee-keeping. Handbook of New Zealand gardening Chapter : p183-188. Whitcombe and Tombs, Christchurch.
- NEW ZEALAND EXPEDITIONARY FORCE. 1919. (EDUCATION DEPARTMENT) Beekeeping in New Zealand. Waterloo Bros and Layton, London. 31 pp.
- RAYMENT, T. 1916. Money in bees in Australasia. Whitcombe and Tombs Ltd, Melbourne. 293 pp. Second edition (1925?) 280 pp.
- WINTER, T.S. 1946, 1961, 1975. Beekeeping in New Zealand. New Zealand Department of Agriculture. Bulletin No. 267. 162 pp. First revision 1961 : 172 pp. Second revision 1975 : 155 pp. 80L/63; 500L/77.

1. NEW ZEALAND BEEKEEPING INDUSTRY (Continued)

(b) JOURNALS AND NEWSLETTERS

ALIGHTING BOARD, THE 1930-1931. From Vol. 1 (1) November until Vol. 2 (10) August 1931 (?) (monthly). National Beekeepers' Association of New Zealand, Auckland Central Branch, Tuakau.

APIARIST, THE 1978-. From No.1 May 1978 -. Six issues annually. Alliance Bee Supplies Company Ltd, Christchurch. From No. 52 (1987) produced by New Zealand Beeswax Processors Ltd, Orari.

AUSTRALASIAN BEE JOURNAL 1887-1890. From Vol. 1(1) July 1887 to Vol. 3(9) 1890 (monthly). Edited by I. Hopkins.

BEEKEEPERS' BULLETIN 1979-1986. From Vol.1 (1) August 1979 Vol. 7 (4) May 1986 (quarterly). Edited by A.G. Matheson, Nelson. New Zealand Ministry of Agriculture and Fisheries. Became Beelines with No. 28 1986.

BEELINES 1986-From No. 28 August 1986 (quarterly). Edited by A.G. Matheson, Nelson (then Tauranga), New Zealand Ministry of Agriculture and Fisheries.

BUZZWORDS 1985-1986 From No. 1 August 1985 (untitled) - No. 3 May 1986. Edited by M Schrader, Oamaru, New Zealand Ministry of Agriculture and Fisheries.

- FROM MY SIDE OF THE DESK 1980-1982. From No. 1 March 1980 - No. 3 June 1982 (irregular). Edited by J. Smith, Christchurch. New Zealand Ministry of Agriculture and Fisheries.
- NEW ZEALAND AND AUSTRALIAN BEE JOURNAL 1883-1885. From Vol. 1 (1) July 1883 to Vol.2 (24) June 1885 (monthly). Edited by I. Hopkins. (Subsequently incorporated into the New Zealand Farmer, Bee and Poultry Journal).

NEW ZEALAND BEEKEEPER 1939-. From Vol. 1 (1) January 1939 (quarterly). Published by the National Beekeepers' Association of New Zealand (Inc.) until August 1975; then subsequently published for N.B.A. by Agriculture Press Co. Ltd, Masterton until No. 180 December 1983. NBA resumed publishing with No. 183 1984.

- NEW ZEALAND BEEKEEPERS' JOURNAL 1914-1922. From Vol. 1 (1) July 1914 to Vol. 6 (10) October 1922 (monthly). Published by the National Beekeepers' Association of New Zealand (Inc.). Subsequently merged with New Zealand Fruitgrower to become the New Zealand Fruitgrower, and Apiarist).
- NEW ZEALAND FARMER, BEE AND POULTRY JOURNAL 1885-1901. From Vol. 4 (1) January 1885 to Vol. 21 (4) April 1901 (monthly). (Subsequently renamed the New Zealand Farmer? Stock and Station Agent, and still later the New Zealand Farmer.)
- NEW ZEALAND FRUITGROWER AND APIARIST 1922-1927. From Vol. 55(2) November 1922 to Vol. 9 (12) September 1927 (monthly). (Subsequently renamed New Zealand Smallholder.)
- NEW ZEALAND HONEYBEE 1937-1939. From Vol. 1 (1) August 1937 to Vol. 2 (6) January 1939 (monthly). Edited by P.A. Hillary, Papakura.
- NEW ZEALAND HONEY PRODUCER 1929-1930. From Vol.1 (1) July 1929 to to Vol. 2 (6) December 1930 (monthly). Edited by W.B. Bray. Christchurch.
- NEW ZEALAND JOURNAL OF AGRICULTURE 1910-. Included a monthly apiary notes section from 1911 2(6) to 1945 71(6). Frequent apicultural contributions in previous and subsequent volumes, including seasonal domestic notes.
- NEW ZEALAND SMALLHOLDER 1927-1937. From Vol. 10(1) October 1927 to Vol. 19(5) February 1937 (monthly). Includes a section called "The Apiarist". (Official magazine of the National Beekeepers' Association of New Zealand).
- NORTHLAND BEEKEEPING 1985-. From No. 1 July 1985 - three issues annually. Edited by C. Van Eaton, Whangarei. New Zealand Ministry of Agriculture and Fisheries.

SOUTHERN BEEKEEPER 1975-. From No. 1 November 1975 - Four issues annually (interrupted), then irregular. Edited by T.G. Bryant (up to No. 20), then C. Van Eaton (No. 21-26), then C Vardy (No. 27). New Zealand Ministry of Agriculture and Fisheries. WAIKATO BEE NOTES 1978-. From No. 1 May 1978 - Four issues annually. Edited by G.M. Reid, Hamilton. New Zealand Ministry of Agriculture and Fisheries. YOUR NEWSLETTER (FORMERLY : BEEKEEPERS' NEWSLETTER) 1974-1987. From No. 1 February 1974 - No. 40 April 1987. Irregular issue. Edited by D.A. Briscoe (No. 1-23), then T.G. Bryant (No. 24-40) Tauranga. New Zealand Ministry of Agriculture and Fisheries.

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NEW ZEALAND BEEKEEPING INDUSTRY (Continued)

(c) ANNUAL AND PERIODIC REPORTS

ADVISORY SERVICES DIVISION : MINISTRY OF AGRICULTURE AND FISHERIES.

Annual reports of Agriculture Section. In Aug. (3) or Nov. (4) issue of New Zealand Beekeeper from 1939 until 1975, then Sept (3) or Dec (4) issue 1976 onwards.

BEEKEEPING SEMINARS AND TRAINING SCHOOLS. Reports of - Returned Servicemen's Course 1949. New Zealand Beekeeper 11 (3): 8-9.

First Farm School (Timaru) 1954. New Zealand Beekper 16 (4): 9, 23-24.

Instruction Course (Hamilton) 1955. New Zealand Beekeeper 18 (1): 24-27.

Beekeepers' Training School (Timaru) 1964. New Zealand Beekeeper 26 (4): 18-19.

Beekeepers' Training School (Ruakura) 1965. New Zealand Beekeeper 27 (4): 6-7.

Beekeepers' Seminar (Timaru) 1968. New Zealand Beekeeper 30 (4): 6-8.

Beekeepers' Seminar (Ruakura) 1969. New Zealand Beekeeper 31 (4): 41.

Beekeepers' Seminar (Timaru) 1972. New Zealand Beekeeper 34z (2): 19.

Beekeepers' Seminar (Taupo) 1974. New Zealand Beekeeper 36 (4): 18-21.

ENTOMOLOGY DIVISION : DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. Pollination Report, edited by P.E.C. Read. No. 1 (1979)-. Contains information on pollination and management of bumble, alkali and leafcutter bees.

MINISTER OF AGRICULTURE.

Annual address (or summary) to Annual Conference N.B.A. Usually in August (3) issue New Zealand Beekeeper until 1975, then September (3) issue 1976 onwards. NATIONAL BEEKEEPERS' ASSOCIATION President's address and annual report to N.B.A. In August (3) issue of New Zealand Beekeeper until 1975, then September (3) 1976 issue onwards.

NEW ZEALAND HONEY MARKETING AUTHORITY. Annual report and statement of accounts. Incorporated in May (2) issue New Zealand Beekeeper until 1974. Issued separately thereafter.

RESEARCH DIVISION, MINISTRY OF AGRICULTURE AND FISHERIES. Annual reports of Apiculture Section, Wallaceville. From 1968 to 1975 either in August (3) or November (4) issue of New Zealand Beekeeper. After 1975 either in September (3) or December (4) issue.

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1. NEW ZEALAND BEEKEEPING INDUSTRY (Continued)

(d) GENERAL SITUATION AND HISTORY

- AGRICULTURAL DEVELOPMENT COMMITTEE . 1946. Report on beekeeping. New Zealand Beekeeper 8(2) : 11-17.
- ANONYMOUS. 1879. Beekeeping. New Zealand Country Journal. 3(4) : 229-231.
- ANONYMOUS. 1880. Beekeeping and farming. New Zealand Country Journal 4(3) : 195-196.
- ANONYMOUS. 1960. Horticultural development, 1910-1960: beekeeping. New Zealand Journal of Agriculture 101(2):192.
- ANONYMOUS. 1963. An assessment of the beekeeping industry. (A report of a meeting of representatives

of the beekeeping industry, agriculture, and Government Departments). Prepared by New Zealand Department of Agriculture Wellington. 18 pp.

- ANONYMOUS. 1963. Assessment of the beekeeping industry. New Zealand Beekeeper 25(3):38-39.
- BAINES, F.C. 1923. Beekeeping in New Zealand. Bee World 5(4):50-52 (Part 1); 5(5):68-70 (Part 2).
- BALE,M.D.1967. A study of the marketing of New Zealand honey. Massey University Department of Agricultural Economics and Farm Management Discussion Paper No. 48. 80pp.
- BERRY, I. 1978. Money not the only goal. New Zealand Journal of Agriculture 136 (9):61-63.
- BERRY, I. 1979. Learning from others. New Zealand Journal of Agriculture 139(1): 64-65,67.
- BRAY, J.K. 1986. Out of the past how Airborne Honey began. New Zealand Beekeeper 188:25-27.
- COOK, V.A. 1967. Facts about beekeeping in New Zealand. Bee World 48(3):88-100. 320/68
- COOK, V.A. 1978. Bright prospects for beekeeping. New Zealand Journal of Agriculture 137(11):24-25. (Reprinted in Apiarist 5:1 1979).

- DAWSON, C. 1964. 125 years of beekeeping in New Zealand. New Zealand Beekeeper 26(2):2-3.
- GIVEN, B.B. 1966. Beekeeping. In McLintock, A.H. (ed). An encyclopaedia of New Zealand. Wellington, Government Printer, pp 186-187.
- HILLARY, P.A. 1933. The honey industry : costs of production; selling value of honey. New Zealand Smallholder 15(7) : 350-353.
- HOPKINS, I. 1905. Report on status of New Zealand apiculture: after appointment to Department of Agriculture. Annual Report, Wellington, Department of Agriculture: 403-405
- HOPKINS, I. 1907. First statistics of New Zealand Beekeeping. Annual Report, Wellington, Department of Agriculture: 225-228.
- HOPKINS, I. 1911. Bee industry. Annual Report, Wellington, Department of Agriculture : 74-76.
- HOPKINS, I. 1913. The bee industry. Annual Report, Wellington, Department of Agriculture : 105-109.
- HOPKINS, I. 1914. Beekeeping in New Zealand. New Zealand Journal of Agriculture 9(6):485-487.
- HOPKINS, I. 1916. Forty-two years of beekeeping in New Zealand 1874-1916. New Zealand Farmer 1915 reprint: 38 pages. Serialised in New Zealand Beekeeper 1974, 36(1):35-43; 36(2): 60-66; 36(3):44-47.
- HORTICULTURE DIVISION. 1942. The beekeeping industry. New Zealand Beekeeper 4 (1) : 1-3.
- JACOBSEN, F.A. 1913. Essentials necessary in establishing the industry. New Zealand Journal of Agriculture 6(4):411-414.
- JACOBSEN, F.A. 1915. Controlling factors in apiculture.New Zealand Journal of Agriculture 11: 122-125.
- JOHANSSON, T.S.K. 1981. Kiwi beekeeping. Gleanings in Bee Culture 109 (11): 624-627; 109(12): 667-670. 134 L/83

- LENNON, W.J. 1948. Bees in their bonnets (a history of Otago and Southland beekeeping). New Zealand Beekeeper 10(3) and 10(4): 21-37 (40 page illustrated reprint, Benyon Printing Co., Timaru).
- McARTHUR, A.F. 1933. Beekeeping conditions in New Zealand. Bee World 14(1):6-7.
- MARTIN, P. 1921. Beekeeping or honey producing : some of the difficulties. New Zealand Beekeepers' Journal 5(4) : 66-67.
- MARTIN, S. 1982. Beekeeping: honey and other hive products. Wellington, Development Finance Corporation of New Zealand, Industry profile no. 19. 54pp. (Revised edition 1982, 57pp).
- MATHE, H. 1916. Beekeeping for women. New Zealand Beekeepers' Journal 23: 384-385.
- NEW ZEALAND PARLIAMENT. 1972. Report of a committee of Government Caucus on an inquiry into the New Zealand honey industry, March 1972. Government Printer, Wellington, 34 pp.
- OTTE, B.C. 1983. Beekeeping "down under". Gleanings in Bee Culture 111 (3): 154, 158.
- PENDER, W.S. 1920. Beekeeping in New Zealand. New Zealand Beekeepers' Journal 4(5):90-91.
- SMITH, J. 1986. End of an era or start of a new age. Apiarist 48:1. (History of Alliance Bee Supplies).
- THOMPSON, H.F. 1880, 1881. Keeping bees in New Zealand. New Zealand Country Journal 4(6):352-357 (1880); 5(2): 113-119(1881).
- WALLINGFORD, N. 1979. The nature of apiculture in a changing agriculture. New Zealand Beekeeper 40(2): 15-16.
- WALLINGFORD, N. 1981. The way we used to bee piano wires and honey marketing. New Zealand Beekeeper 42(3):19.
- WALLINGFORD, N. 1982. The way we used to bee we lead the world. New Zealand Beekeeper 43(2):22.
- WARD, E.G. 1921. Beekeeping as an occupation for women. New Zealand Beekeepers' Journal 5 (11) : 197-199.

WINTER, T.S. 1941. Survey of beekeeping industry. New Zealand Journal of Agriculture 62(6) : 447. WINTER, T.S. 1958. Brief review of beekeeping in New Zealand. New Zealand Beekeeper 20(2) : 27-28.

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1. NEW ZEALAND BEEKEEPING INDUSTRY (Continued)

(e) ORGANIZATIONS AND HISTORIC EVENTS

ANONYMOUS. 1888. Foul brood disease in bees prevention Act. Australasian Bee Journal 2(2):23-24 (historical: first proposed bee legislation)

- ANONYMOUS. 1926. Beekeepers at Ruakura state apiary. New Zealand Fruitgrower and Apiarist 8(5):253-256.
- ANONYMOUS. 1929. Field day at Ruakura New Zealand Small holder 11(6):320-324.
- ANONYMOUS. 1938. Beekeeping reminiscences. New Zealand Honeybee 2(1):5-6; 2(2):14,11 (assorted speakers at the 25th anniversary banquet of the National Beekeepers' Association).
- ANONYMOUS. 1953. Everest. Bee World 34(7) : 127.
- ANONYMOUS. 1970. Apiaries Act 1969. New Zealand Beekeeper 32(1):26.
- ANONYMOUS. 1974. The Alliance Bee-Supplies Company Limited fiftieth anniversary. New Zealand Beekeeper 36(3):48.
- ASHCROFT, W.J.C. 1986. The Hawkes Bay earthquake: its effect on an apiary. New Zealand Beekeeper 189:11.
- BAGNALL, L.J.; HOPKINS, I. 1884. Early beekeeping associations in New Zealand. New Zealand and Australian Bee Journal 1(10):117-119; 1(11):126-128; 1(12): 139-140.
- BERRY, I. 1980. Job opportunities. New Zealand Journal of Agriculture 141(2): 77,79.
- BERRY, I. 1984. Industry planning workshop. New Zealand Beekeeper 182:14-15.
- BRAY, W.B. 1910. Profitable beekeeping (an inquiry into breeding and requeening as factors). New Zealand Journal of Agriculture 1(4): 265-268.
- BYRD, R.E. 1929. Honey for Antarctic. New Zealand Smallholder 11(4) : 225.
- COOK, V.A. 1973. Discussion groups for beekeepers. New Zealand Journal of Agriculture 127(6):46.

- DAWSON, C. 1980. The first Maori book about bees and beekeeping. New Zealand Beekeeper 41(1):28.
- EARP, E.A. 1932. The Apiaries Act (1927) and its provisions. New Zealand Journal of Agriculture 44(6): 409-411.
- FORBES, I.G. 1969. Proceedings of the beekeeping seminar. Ruakura Animal Research Centre, Hamilton, 20-21 August 1969. New Zealand Department of Agriculture, Wellington, 93pp.
- FORSTER, I.W. 1975. Recent work by Research Division into various aspects of practical beekeeping. New Zealand Beekeeper 37(2): 16-22.
- HOOK, P.J. 1973. Trends in modern farming and their effect on beekeeping. New Zealand Beekeeper 35(4):48,72.
- HOPKINS, I. 1888. The New Zealand Beekeepers' Association. Australasian Bee Journal 1(10):148-149, 154-155; 1(11):172.
- HOPKINS, I. 1906. State apiary at Ruakura. Annual Report, Wellington, Department of Agriculture: 429-434.
- HOPKINS, I. 1907. Model apiary at International Exhibition, Christchurch 1906-1907. Annual Report, Wellington, Department of Agriculture: 245-246 (7 plates).
- HORTICULTURE DIVISION 1942. Labour for beekeeping industry. New Zealand Beekeeper (4(4): 6-7.
- HORTICULTURE DIVISION. 1954. Beginning of beekeeping in New Zealand and beekeeping legislation. New Zealand Beekeeper 16(4): 12-15.
- McCAW, A. 1985. Industry planning report. New Zealand Beekeeper 185:16.
- McFADZIEN, J. 1953. The top of Mount Everest. New Zealand Beekeeper 15(3) : 8-9.
- MARSHALL, P.W. 1985. Telford Farm Training Institute. New Zealand Beekeeper 185: 19-20.
- MATHESON, A.G. 1983. Proceedings of MAF beekeepers seminar, Nelson 26 July 1983. Nelson, Ministry of Agriculture and Fisheries 60 pp. 843/85

- POPE, C.A. 1934. The National : past, present and future. New Zealand Smallholder 17(1): 38-39.
- REID, G.M. 1973. Practical aspects of some recent research. New Zealand Beekeeper 35(1): 31-34.
- REID, G.M. 1973. Apicultural research and developments into the 1980's. New Zealand Beekeeper 35(2): 26-27. 94L/74
- SIMPSON, K.W. 1981. Telford "tops" for beekeeping. New Zealand Beekeeper 42(4):11.
- SMAELLIE. E. 1966. The Apiaries Act 1965. New Zealand Beekeeper 28(3):35-38. 56L/67
- SMITH, J. 1972. A checklist of "do's and don'ts" for beekeepers who want to get along with farmers. New Zealand Beekeeper 34(4):7.
- STANDARDS ASSOCIATION OF NEW ZEALAND. 1972. Model general by-laws (Chapter 13: The keeping of animals, poultry and bees). New Zealand Standard 9201. 12 pp.
- TRYTHALL, A.B. 1922. Model apiary building at Ruakura. New Zealand Journal of Agriculture 24(3): 168-169.
- WALSH, R.S. 1972. Meet the commercial beekeeper. New Zealand Beekeeper 34(4):33.
- WALTON, G.M. 1974. Honey: its production, processing, packaging, and promotion. Proceedings of the 1974 beekeepers' seminar, Palmerston North, Ministry of Agriculture and Fisheries, 137 pp.
- WALTON, T. 1977. Apiary advisory service feels winds of change. New Zealand Beekeeper 29(1):7-9.
- WINTER, T.S. 1945. Waikato convention. New Zealand Beekeeper 7(1): 13-14.

1. NEW ZEALAND BEEKEEPING INDUSTRY (Continued) (f) PERSONALITIES ANONYMOUS. 1922. A pioneer of Australasian beekeeping. (Biography of I. Hopkins). Bee World 3(9): 230-233. (Biography of I. Hopkins). ANONYMOUS. 1953. Everest. Bee World 34(7):127. ANONYMOUS. 1954. Hillary fund. Bee World 35(6):116. ANONYMOUS. 1958. Hillary at the South Pole. New Zealand Beekeeper 20(1):13. ANONYMOUS. 1985. A real veteran (R.V. Glasson). New Zealand Beekeeper 187:15. 1979. Mr Robert Gibb - Southland BRYANT, T.G. beekeeping pioneer. New Zealand Beekeeper 40(1):18.DAWSON, C. 1979. Waitangi treaty has links with first beekeeper. New Zealand Beekeeper 40(1):19-22. 840/80 EARP, E.A. 1925. Isaac Hopkins (obituary). New Zealand Journal of Agriculture 31(2): 131-132. HORN, C.F. 1970. Reminiscing with Charles F. Horn. New Zealand Beekeeper 32(1):10-12. McFADZIEN, J. 1953. The top of Mount Everest. New Zealand Beekeeper 15(3):8-9. ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE. 1964. Beekeepers named for honorary diplomas in apiculture. New Zealand Beekeeper 26(1) : 2-3. SHOWLER. K. 1978. William Charles Cotton and the first bees in New Zealand. New Zealand Beekeeper 39(2):20-21. WINSLADE, G. 1966. NBA members visit Australian apiaries. New Zealand Beekeeper 28(3):32-33, 38.

1. NEW ZEALAND BEEKEEPING INDUSTRY (Continued)

(g) REGIONAL ASPECTS

- ANONYMOUS. 1954, 1957. Bees for the Chatham Islands. New Zealand Beekeeper 16(1):5(1954); 16(2):24 (1954); 19(2): 28-29 (1957).
- BRUNT, P.J.; MATHESON, A.G. 1980. Beekeeping education thrives in the north of the South Island. New Zealand Beekeeper 41(2):27.
- CARROLL, G. 1977. Honey shows big potential in Tekapo development. New Zealand Beekeeper 39(2): 13-14.
- COOK, V.A. 1973. Potential for honey production. New Zealand Journal of Agriculture 126(5): 53-54. (South Island 254/76).
- DICKINSON, I.J. 1980. Bees in the high country. Apiarist 13:1-4.
- GODDARD, R. 1952. Beekeeping in Tauranga county. New Zealand Journal of Agriculture 84(3):223-224. 155/54
- HAYES, G.W. 1984. Arataki Honey Ltd of New Zealand. American Bee Journal 124(9):655-657.
- JEFFERY, G.L. 1978. Intensive beekeeping could be the means of saving West Coast forests. Forest and Bird 207:6-8.
- JOHNSON, L.H. 1950. Beekeeping in Taranaki. New Zealand Journal of Agriculture 81(3). 205-208.
- JOHNSON, L.H. 1959. Beekeeping on the Manawatu plains. New Zealand Journal of Agriculture 98(5):469-472. 186/60
- KOLB, H. 1984. A glimpse at commercial beckeeping in New Zealand. American Bee Journal 124(7):536-537.
- LEDGARD, N.; SIMES, W. 1983. Honey production at 900 m in Craigieburn Forest Park. New Zealand Beekeeper 177: 25-27.
- LEDGARD, N.; SIMES, W. 1984. High country beekeeping. New Zealand Beekeeper 184: 27-29.
- LENNON, W.J. 1948. Beekeeping at Stewart Island. New Zealand Beekeeper 10(4):19.

- MACFARLANE, R.P. 1980. Bees, bee forage and pollination on the Chatham Islands. New Zealand Beekeeper 41(1):5-6. 1492/81
- MYERS, A.T. 1945. Beekeeping on the West Coast. New Zealand Journal of Agriculture 71(6): 585-586.
- ROPE, C.G. 1985. Beekeeping on islands of the Hauraki Gulf has its problems. New Zealand Fruit and Produce July/August 1985: 22-23.
- SEAL, D.W.A. 1957. Beekeeping on West Coast of South Island. New Zealand Journal of Agriculture 94(2): 167-168.
- SIMPSON, K.W. 1981. The potential for bees in oversown tussock. New Zealand Beekeeper 42(4):27-28.
- SIMPSON, K.W. 1981. Honey bees, a missing link in high country maintenance? New Zealand Farmer 102(8): 94-95.
- SMITH, J. 1981. Saga of Chatham non-beekeeping. New Zealand Beekeeper 42(2):9.
- TANE, H. 1982. Big hive potential limited by access and land tenure. New Zealand Beekeeper 43(3):9-10. (Marlborough and North Canterbury).
- WALLINGFORD, N. 1981. The way we used to bee some good West Coast yarns. New Zealand Beekeeper 42(4):25.
- WALSH, R.S. 1946. Beekeeping in North Auckland. New Zealand Journal of Agriculture 73(5):447-452.
- WOODD, R. 1983. Sweet job, sometimes. New Zealand Farmer 104(8):111,113. (Beekeeping in eastern Taranaki).

2. INTERNATIONAL BEEKEEPING

(AS REPORTED BY NEW ZEALAND AUTHORS, WITH RELEVANCE TO NEW ZEALAND). ANONYMOUS. 1984. Bees in Scandinavia. Apiarist 35: 1-2. ANONYMOUS. 1984. Brazilian beekeeping. Apiarist 37: 1-2; 39: 5-6. ANONYMOUS. 1985. Beekeeping in Papua New Guinea. New Zealand Beekeeper 188:28. 103L/87 BRYANT, T.G. 1976. "Black, with a very hot tail ..." New Zealand Beekeeper 38(4):27-28. (impressions of beekeeping and bee research in Britain and Europe). BRYANT, T.G. 1980. Two queen systems of Alberta. New Zealand Beekeeper 41(4):25. CLINCH, P.G. 1971. Examination of bees from Tonga reveals a new ascid mite. New Zealand Beekeeper 33(4):4-6. CLOAKE, M. 1966, 1967, 1968. Assessment of Canadian beekeeping. New Zealand Beekeeper 28(4): 36-37 (1966); 29(1): 32-34 (1967); 30(2):16-18 (1968). CLOAKE, M. 1979. Apimondia in Greece - hives amid history. New Zealand Beekeeper 40(4):10-11COMPTON, D. 1984. Commercial beekeeping in Michigan. New Zealand Beekeeper 184 : 19-20. DAWSON, C. 1973. Beekeeping for Papua New Guinea. New Zealand Beekeeper 35(4):19-20. DAWSON, C. 1974. Beekeeping started in Papua New Guinea. New Zealand Beekeeper 36(4):61-68.DAWSON, C. 1975. Beekeeping conference at Banz, Papua New Guinea. New Zealand Beekeeper 37(3):56-58. EYLES, G.; SMITH, G. 1972. Apiculture for Thailand. New Zealand Journal of Agriculture 125(6):39.FOSTER, G. 1889. A letter from the South Sea Islands. Australasian Bee Journal 3(3):37-38.

- 19 -

- HEINEMANN, J. 1985. Common interest makes for friendships. New Zealand Beekeeper 187:37-38. (Cook Islands Beekeeping).
- HOBSON, J.V. 1982. Concrete hives have role to play in tropical islands. New Zealand Beekeeper 43(3):11-12.
- MACKISACK, J.B. 1968. Beekeeping on Niue Island. New Zealand Beekeeper 30(3):18-21. 870L/70
- MACKISACK, J.B. 1968. The beekeeping dream that became a reality. Pacific Islands Monthly 39(10):143, 145, 147.
- MATHESON, A.G. 1983. The land of water, wood (and cheap rum). New Zealand Beekeeper 179:17-18. (Beekeeping in Jamaica).
- MATHESON, A.G. 1985. Apiculture in tropical climates: a report on the third international conference on apiculture in tropical climates. Nelson, A.G. Matheson, 49 pp.
- MATHESON, A.G. 1985. Impressions of beekeeping in Kenya, New Zealand Beekeeper 185: 10–11.
- MATHESON, A.G. 1985. Options for beekeeping development; a Jamaican case study. Proceedings of the Third International Conference on Apiculture in tropical climates, Nairobi, 1984, 104-108. 130L/86
- MATHESON, A.G. (ed.). 1986. MAF apiculture section study tour of New South Wales. Nelson, Ministry of Agriculture and Fisheries, 116 pp.
- PARSONS, C.K. 1982. A kiwi's view of Aussie beekeeping. Apiarist 27: 1, 3-4.
- PEAT, N. 1979. New Zealander makes his mark in PNG. New Zealand Beekeeper 40(1):16-17.
- REID, G.M. 1971, 1972. Canadian beekeepers have problems too. New Zealand Beekeeper 33(3):37-40 (1971); 34(1):39 (1972).
- REID, G.M. 1979. Some aspects of honeydew production in other countries. Apiarist 9: 5.
- REID, G.M. 1980. Twenty-five percent more honey, or how to afford a Cadillac. New Zealand Beekeeper 41(1):23-24.

SMITH, J. 1978. Polish techniques in bee breeding. New Zealand Beekeeper 39(1):14-15.
VAN EATON, C.N. 1983. Coming threats to North American beekeeping and the New Zealand response. Apiarist 31:1-2,8; 32:2.
WALSH, R.S. 1967. Beekeeping in Niue. New Zealand Beekeeper 29(1):10-12.
WALSH, R.S. 1967. Advance guard to Niue Island. New Zealand Beekeeper 29(2):24.
WALSH, R.S. 1968. Beekeeping prospects in the Islands. Pacific Islands Monthly 39(10):147-153. 103/71
WALSH, R.S. 1972. Beekeeping in Java. New Zealand Beekeeper 34(4): 28-30 111L/76
WALTON, G.M. 1969. Beekeeping methods in North America. New Zealand Journal of Agriculture 118(2):44-47.
WALTON, G.M. 1969, 1970. Beekeeping in North America. New Zealand Beekeeper 31(3):28-31 (1969); 32(1):4-8 (1970).
WALTON, G.M. 1976. Beekeeping development programmes in the tropical and subtropical Pacific. <u>In</u> Crane, E.(ed.) Apiculture in Tropical Climates. Bucks, England, International Bee Research Association, pp 159-164.
WALTON, G.M. 1977. A Scottish beekeeping business. New Zealand Beekeeper 39(1):19-20.

- 20 -

3. THE HONEY BEE

(a) BEE BIOLOGY

CLINCH, P.G.; FAULKE, J. 1977. Effect of population density and storage temperature on the longevity of caged worker honey bees. New Zealand Journal of Experimental Agriculture 5: 67-69.

CLINCH, P.G. 1981. Rapid methods for orally dosing adult honey bees, individually or in groups, without anaesthetic. New Zealand Journal of Experimental Agriculture 9: 27-30.

COOK, V.A. 1962. Drifting of bees: effect of hives placed in a circle. New Zealand Journal of Agriculture 105(5):407-410.

COOK, V.A. 1965. The anatomy and physiology of the honey bee. New Zealand Beekeeper 27(4):10-17.

- COOK, V.A. 1966. Bee stings. New Zealand Beekeeper 28(4): 32-35.
- COOK, V.A. 1967. The honey bee colony. New Zealand Beekeeper 29(3): 20-25.

COOK, V.A. 1968. Severe clipping of queens' wings increases supersedure rate. New Zealand Beekeeper 30(3):32. 644/71

- COOK, V.A. 1968. Bee stings and their treatment. New Zealand Journal of Agriculture 117(3): 111-113.
- COOK, V.A. 1970. Puff ball control of bees. New Zealand Journal of Agriculture 120(5):72-73,75. 189/74
- DAVIDSON, R. 1966. Some observations on swarming. New Zealand Beekeeper 28(1):12-15.

DONOVAN,B.J.1974. Bees of the World. Part IV. Honey bees in New Zealand. New Zealand Beekeeper 36(4):46-48. 950L/76

- DOULL, K.M. 1951. The honeybee. Canterbury Agricultural College, Lincoln. 15 pp.
- FORSTER, I.W. 1969. Swarming and its control. New Zealand Beekeeper 31(4):4-9. 967L/71

- FORSTER, I.W. 1971. Effect of clipping queen honey bees' wings. New Zealand Journal of Agricultural Research 14(2):535-537. 445/72
- FORSTER, I.W. 1971. The effect of air or surface mailing of queen bees on subsequent breeding, honey production, and queen supersedure. New Zealand Journal of Agricultural Research 14(4):951-953.
- FORSTER, I.W. 1975. An evaluation of various characteristics in three lines of New Zealand honey bees. New Zealand Journal of Experimental Agriculture 3(3):293-297.
- FRASER, C.H.G. 1935. The honey bee. Nelson, Cawthron Institute Bulletin No.17.
- GOODWIN, R.M. 1983. Dance language and recruitment of the honey bee (<u>Apis mellifera</u> L.). M.Sc. thesis, University of Auckland.
- HILGENDORF, F.W. 1902. On a supposed magnetic sense of direction in bees. Transactions and Proceedings of the New Zealand Institute 35 : 483-489.
- HUDSON, G.V. 1901. On the senses of insects. Transactions and Proceedings of the New Zealand Institute 34 : 18-31.
- JAY, S.C.; WARR, D. 1984. Sun position as a possible factor in the disorientation of honeybees in the southern hemisphere. Journal of Apicultural Research 23(2): 143-147. 896/85
- MATHESON, A.G. 1986. What happens in a honey bee colony after the queen is lost? New Zealand Beekeeper 191:33.
- MERCER, A.R. 1982. The effects of amines on behaviour and neural activity in the honeybee. In: Breed, M. D. et al. (ed). <u>The biology of</u> <u>social insects</u>. Colorado, Westview Press, <u>pp 360-363</u>.
- MERCER, A.R.; ERBER, J. 1983. The effects of amines on evoked potentials recorded in the mushroom bodies of the bee brain. Journal of Comparative Physiology 151: 469-476.

- MERCER, A.R.; MENZEL, R. 1982. The effects of biogenic amines on conditioned and unconditioned responses to olfactory stimuli in the honeybee, <u>Apis mellifera</u>. Journal of Comparative Physiology 145: 363-368.
- MERCER, A.R.; MOBBS, R.G.; DAVENPORT, A.P.; EVANS, P.D. 1983. Biogenic amines in the brain of the honeybee, <u>Apis mellifera</u>. Cell and Tissue Research 234: 655-677.
- MILLER, A.C. 1919. Swarm impulse is it inherited? New Zealand Beekeepers' Journal 3(2):29.
- MOBBS, P.G.; MERCER, A.R. 1984. A glyoxylic acid method for the localisation of catecholamines in insect nervous systems. Stain Technology 59: 58-61.
- PEER, D. 1980. Bee behaviour. Apiarist 12:1,3,6.
- PEER, D. 1980. The colony and how it develops. Apiarist 12: 4.
- PHILLIPS, C. 1895. On the construction of the comb of the hive bee. Transactions and Proceedings of the New Zealand Institute 28 : 479-490.
- REID, G.M. 1972. The relationship of diet and age to the physiology of longevity in caged honey bees (Apis mellifera L). M.Sc. thesis University of Guelph, Canada, 92 pp.
- REID, G.M. 1973. Role of the drone honey bee. New Zealand Journal of Agriculture 127(4): 47-50.
- REID, G.M. 1973. Drones, the forgotten caste. New Zealand Beekeeper 35(2):37-40; 35(3):62-64. 129L/74
- REID, G.M. 1976. Bees vital link in New Zealand's energy pattern. New Zealand Beekeeper 38(2):11.
- ROBINSON, D.S. 1948. Effect of roof colour on hive temperatures. New Zealand Journal of Agriculture 77(5):509.
- STEWART, D. 1977. Bees as air pollution monitors. New Zealand Beekeeper 39(2):11.
- WALTON, G.M. 1968. Aggressive behaviour of queen-right <u>Apis mellifera</u> L. workers in small cages towards introduced queens. M.Sc. thesis University of Guelph, Canada 121 pp.

WALTON, G.M. 1971. Aggressive behaviour of honey bees. New Zealand Beekeeper 33(2):26-31.
WALTON, G.M.; SMITH, M.V. 1969. Balling behavior of worker honey bees. American Bee Journal 109(8):300-301, 305. 378/71
WALTON, G.M; SMITH, M.V. 1970. Effect of mandibular gland extirpation on acceptance of the queen honey bee. Journal of Economic Entomology 63(3):714-715. 100/72
WILSON, J.D.; SOMERFIELD, S.D. 1981. Desensitisation for bee sting reactions. New Zealand

Medical Journal 93 (686):430-431.

1212L/84

- 24 -

3. THE HONEY BEE (Continued)

(b) INTRODUCTION AND DISTRIBUTION

- ALLOM, G. 1843. Comments on introduction of honeybees to New Zealand. New Zealand Journal London 4:63 (March); 4:305 (Nov.).
- BAINES, F.C. 1915. Black versus Italian bees. New Zealand Beekeepers' Journal 14:235-238.
- BRITISH BEE JOURNAL 1969. The first bees in New Zealand. British Bee Journal 97(4194):150-152.
- COTTON, W.C. 1842. My bee book. London, J.C.F. and J. Rivington. pp 60-68. (Section on taking bees to New Zealand)
- DAWSON, C. 1979. Waitangi treaty has links with first beekeeper. New Zealand Beekeeper 40(1):19-22. 840/80
- DAWSON, C. 1980. How were bees brought to New Zealand? New Zealand Beekeeper 41(1):29-30.
- DONOVAN, B.J. 1974. Bees of the world. Part IV: Honey bees in New Zealand. New Zealand Beekeeper 36(4):46-48. 950L/76
- DONOVAN,B.J.1980. Interactions between native and introduced bees in New Zealand. New Zealand Journal of Ecology 3:104-116.
- DULCAMARA 1881. The Ligurian bee. New Zealand Country Journal 5(2):143.
- HOPKINS, I. 1884. Successful importation of Italian queen bees direct from Italy. New Zealand and Australian Bee Journal 1(8):88-89.
- HOPKINS, I. 1884. Bee pasturage. New Zealand and Australian Bee Journal 2(16):47-48 (refers to poisonous honey attributed to Wharangi and Wharangipiro).
- HOPKINS, I. 1887. Bright and "leather coloured" Italians. Australian Bee Journal 1(6):85-86.
- HOPKINS, I. 1893. Introduction of the black, or German, and Italian bees into New Zealand. New Zealand Country Journal 17:342-344.

- HOPKINS, I. 1916. Prohibiting the importation of hive bees into New Zealand. New Zealand Beekeepers' Journal 24:405-409.
- JACOBSEN, F.A. 1912. Blacks and Italian bees. New Zealand Journal of Agriculture 4(2):138-139.
- MATHESON, A.G. 1982. Nelson bees, 140 years on. New Zealand Beekeeper 43(4):13.
- PALMER-JONES, T. 1965. Importation of honey bees in immature stages. New Zealand Beekeeper 27(3):16-19.
- PALMER-JONES, T. 1971. The case against importing honeybees into New Zealand. New Zealand Beekeeper 33(4):6-8. 756/72
- ROPE, C.G. 1980. We've come a long way in a few years. New Zealand Beekeeper 41(2):11.
- SHOWLER, K. 1978. William Charles Cotton and the first bees in New Zealand. New Zealand Beekeeper 39(2):20-21.
- THOMSON, G.M. 1922. <u>Apis mellifera</u>. The naturalisation of animals and plants in New Zealand. Cambridge, University Press : pp 279-282.
- TILLYARD, R.J. 1924. Some remarks on the evolution of the bee. New Zealand Fruitgrower and Apiarist 7:98-99.

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- 4. BEE FORAGE
- (a) GENERAL NECTAR AND POLLEN SOURCES, NECTAR SECRETION.
- ANONYMOUS. 1979. Nectar and pollen plants for the West Coast of the South Island. West Coast Branch, National Beekeepers' Association, 8pp.
- BARKER, W.E. 1915. The flora of New Zealand in relation to bees. New Zealand Beekeepers' Journal 10:170-171.
- BERRY, I. 1978. The honey flow. New Zealand Journal of Agriculture 137(12):64-65.
- COCKAYNE, A.H. 1916. The present and future sources of honey in New Zealand. New Zealand Journal of Agriculture 13:27-35 (also New Zealand Beekeepers' Journal 24:398-405).
- COOK, V.A. 1969. Trees for bees. New Zealand Journal of Agriculture 118(6):45-47.
- COOK, V.A. 1972. The carrying capacity of beekeeping areas. New Zealand Beekeeper 34(4):16-21. 660L/75
- COOK, V.A. 1973. South Island potential for honey production. New Zealand Journal of Agriculture 126(5):53-54. 254/76
- DAVIES, D.J.G.; MACFARLANE, R.P. 1979. Multi-purpose trees for pastoral farming in New Zealand: with emphasis on tree legumes. New Zealand Agricultural Science 13(4):177-186. 884L/84
- FIX, W.J. 1939. Honey producing flora in Canterbury. New Zealand Journal of Agriculture 58(2):172-173.
- GIBB, R. 1932. Honey flora: native trees and plants of New Zealand. New Zealand Smallholder 15(2):112-113.
- GRIFFIN, L.A.M. 1966. Griff's graphs. New Zealand Beekeeper 28(1):2-4.
- GUMBRELL, G.E. 1962. Trees for bees. New Zealand Beekeeper24(2): 34-36.
- HANSEN, A. 1930. Honey-producing flora in the far North. New Zealand Honey Producer 2(3):7.

- HARRIS, J.W. 1978. Trees, bees and Ashburton. Farm Forestry 20(4):87-90. 1465L/78
- HARRIS, W.F.;FILMER, D.W. 1948. Pollen in honey and bee loads. New Zealand Journal of Science and Technology (A) 30:178-187. 136/50
- HOLMES, N. 1982. Bee forage trees; a valuable alternative. New Zealand Journal of Agriculture 145(1):37-38. 885L/84
- HORTICULTURE DIVISION. 1950. Pollen and nectar-bearing trees. New Zealand Beekeeper 12(1):29-31.
- MATHESON,A.G. 1982. Beekeeping nectar and pollen sources, summer/autumn/early winter. Wellington, MAF, 4 pp (AgLink FPP 529). 550L/83
- MATHESON, A.G. 1982. Beekeeping, nectar and pollen sources, winter/spring/early summer. Wellington, MAF, 4 pp (AgLink FPP 530). 551L/83
- NEW ZEALAND BEEKEEPER. 1973. Damage to nectar resources by opossum and deer. New Zealand Beekeeper 35(3):75.
- PAGE, G.F. 1938. Honey-producing plants of Westland, Marlborough and Nelson. New Zealand Journal of Agriculture 57(2):163-164.
- PETERSEN, E.O. 1934. Growing special crops for bees. New Zealand Smallholder 16(4):178; 16(6):270,272; 16(7):320-321; 16(8):367-368; 16(9):413-414; 16(10):462-463; 16(12):562-563.
- PETERSEN, E.O. 1934, 1935, 1936. The honey plants of New Zealand. New Zealand Smallholder 17(2):85-86; 17(3):129-130; 17(4): 175-176; 17(5):223-224; 17(6):272-273; 17(7):321-322; 17(8): 369-370; 17(9):411-412; 17(11):505-506; 17(12) 561-562; 18(1):33-34; 18(2):83-84; 18(3):128-130; 18(4): 179-180; 18(5):225-226; 18(6):269-270; 18(7): 317-318; 18(8):364-365.
- RAMSAY, G. 1973. Trees for bees and shelter in Otago and Southland. New Zealand Beekeeper 35(4):47.

- 29 -

- RAYMENT, T. 1925. Profitable honey plants of Australasia. Melbourne, Whitcombe and Tombs Ltd, 132 pp.
- REID, G.M.; MILLER, R.C. 1979. Tree and shrub species suitable for erosion control, honey bees, and shelter. Hamilton, Ministry of Agriculture and Fisheries, 11pp.
- ROBERTS, D. 1956. Sources and qualities of New Zealand honey. New Zealand Journal of Agriculture 92(3):285-290.
- SIMPSON, K.W. 1982. Bees and plants. Smallfarmer 19:9,11,13. 546L/84
- SMAELLIE, E. 1949. Influence of climate and soil types on nectar secretion. New Zealand Journal of Agriculture 78(4):397-399.
- SMITH, J. 1979. Bee trees. Journal of New Zealand Tree Crops Association 4(1):58.
- UNWIN, C. 1920. Honey plants. New Zealand Beekeepers' Journal 4(7):127.
- VAN EATON, C. 1984. Amenity and farm shelter for bees, Southland/South Otago. Gore, Ministry of Agriculture and Fisheries, 19 pp. 509L/85
- WALLINGFORD, N. 1981. Forage in New Zealand. Gleanings in Bee Culture 109(5):260-262.
- WALSH, R.S. 1967. Nectar and pollen sources of New Zealand. Wellington National Beekeepers' Association of New Zealand, 55 pp. (Revised edition 1978, edited by T Walton and D Williams 59 pp).
- WALSH, R.S. 1971. Is fully stocking often mistaken for over-stocking? New Zealand Beekeeper 33(1):24-27.
- WALSH, R.S. 1972. What excessive humidity means to the beekeeping industry. New Zealand Beekeeper 34(4): 34-37. (adapted from New Zealand Journal of Agriculture 91(1):39-41 (1955).
- WALTON, G.M. 1975. Meteorology and honey production. In: Symposium on meteorology and food production. Wellington, New Zealand Meteorological Service 21 pp 65-72.

WALTON, G.M. 1975. Meteorology and honey production. New Zealand Beekeeper 37(4):23-26.
WALTON, G.M. 1977. Weather factors influencing the production of white clover (<u>Trifolium</u> <u>repens</u>) honey in southern New Zealand. Proceedings of the XXVIth International Apicultural Congress, Adelaide,2 pp 429-432. 626/79
WATERS, R. 1915,1916. Pollen grains as source indicators of honey. New Zealand Journal of Agriculture 11:213-215; 384-388. 12:279-281.

WESTBROOKE, G.V. 1938. Nectar-producing flora in North Auckland districts. New Zealand Journal of Agriculture 56(6) : 469-470.

WILLS, B.J. 1983. Honey in the high country. Apiarist 31:1.

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4. BEE FORAGE (Continued)

(b) SPECIFIC SOURCES OF NECTAR AND POLLEN.

ANONYMOUS. 1978. The honey locust tree. New Zealand Journal of Agriculture 137(11):21-22.

ANONYMOUS. 1980. Is the thyme right for diversification? Apiarist 11:1,3. 212L/81

- BARBER, J.R. 1956. More volcanic news. New Zealand Beekeeper 18(3):43-44 (first harvesting of ling heather).
- BRYANT, T.G. 1977. Thyme honey:liquid gold. New Zealand Journal of Agriculture 135(2): 19,21. 985/79.
- CLAUSEN,P;BEZAR, H. 1978. Honey locust. Journal of New Zealand Tree Crops Association 3 (2): 39-40.
- DONOVAN, B.J. 1979. <u>Vitex negundo incisa</u>, its potential for bee forage in New Zealand (Verbenaceae). Proceedings of Alternative Land Uses in New Zealand Conference, Lincoln College, 4 pp.
- HALL, A.D.; COOK, V.A. 1974. New look at sweet clover. New Zealand Journal of Agriculture 128(6):56-61.
- HAMBLYN, C.J. 1959. Manuka blight losing effectiveness in North Island. New Zealand Journal of Agriculture 99(2):119,121,123. 142/60
- JOHNSON, L.H. 1946. Nectar secretion in clover. New Zealand Journal of Agriculture 73(2): 111-112.
- LENNARD, T. 1980. The story of the honey locust. Journal of New Zealand Tree Crops Association 5(2)14-17.
- MACDONALD, G.B. 1915. Basswood planting. New Zealand Beekeepers' Journal 10:178.

MACFARLANE, R.P.; BERESFORD, R.M. 1982. Tree lucerne in New Zealand. Proceedings of a workshop held by Crop Research Division, DSIR, at Lincoln College, Canterbury, on 8 September 1982, pp 38-47.

MACFARLANE, R.P.; BERESFORD, R.M. 1983. Tree lucerne's potential in pollination, its pests and diseases. Apiarist 29:2.

- MCWHANNELL, F.B. 1958. Eucalyptus trees for New Zealand farms. New Zealand Journal of Agriculture 96(4):329-339.
- NEW ZEALAND JOURNAL OF AGRICULTURE. 1974. Sainfoin. New Zealand Journal of Agriculture 128(3): 39-41.
- PALMER-JONES, T.; FORSTER, I.W. 1969. New variety of clover (Grasslands 4700) attractive to honey bees. New Zealand Beekeeper 31(3):32-34. 654/70
- PATERSON, C.R. 1948. Rewarewa a valuable source of nectar. New Zealand Journal of Agriculture 77(6):604.
- PAYTON, I. 1984. Westland's rata-kamahi forests here today, gone tomorrow? New Zealand Beekeeper 184:24-26.
- REID, G.M. 1974. Peppermint honey. New Zealand Beekeeper 36(2):16. 1160L/76
- ROBERTS, D. 1957. Probable effects of manuka blight on beekeeping in North Auckland. New Zealand Journal of Agriculture 95(3): 279-282. 179/59
- SANDREY, R. 1986. Natural regulation of gorse costs to beekeepers. New Zealand Beekeeper 189:10.
- VAN KRAAYENOORD, C.W.S. 1979. Willows for bees. Journal of New Zealand Tree Crops Association 4(2):37-39.
- WALSH, R.S. 1941. Taking advantage of the rape honey flow. New Zealand Beekeeper 3(4):1-3.
- WARD, E.G. 1922. Hubam clover. New Zealand Beekeepers' Journal 6(7):112-115
- WARDLE, P. 1971. Biological flora of New Zealand. <u>Metrosideros umbellata</u> Cav. (syn. <u>M.</u> <u>lucida</u> (Forst.f.) A. Rich) (Myrtaceae) <u>southern rata</u>. New Zealand Journal of Botany 9:645-671.
- WEBB, C.J. 1980. Tree lucerne in New Zealand. Journal of New Zealand Tree Crops Association 5(1):30.
- ZONDAG,R, 1971. Honey bees trapped in <u>Protea</u> <u>longiflora</u> flowerheads. <u>New Zealand</u> Entomologist 5(1):85-87.

4. BEE FORAGE (Continued)

(c) HONEYDEW HONEY SOURCES

- BELTON, M. 1979. The place of the beech scale insect (Ultracoelostoma assimile) in the ecology of mountain beech forest. Apiarist 8: 4-6.
- COOK, V.A. 1971. Beech honeydew. New Zealand Beekeeper 33(1):14,15. 410L/72

COOK, V.A. 1971. Beech honeydew's export potential. New Zealand Journal of Agriculture 122(3):51.

- COOK, V.A. 1981. New Zealand honey from beech. Bee World 62(1):20-22. 1073L/81
- CROZIER, L.R. 1978. A study of beech honeydew in the Oxford State Forest. B. For. Sc. thesis, University of Canterbury, 83 pp.
- CROZIER, L.R. 1981. Beech honeydew : forest produce. New Zealand Journal of Forestry 26(2):201-209. 1234L/83
- DALZELL, K.W.; SINGERS, W.A'. 1975. A survey of some South Island honeydew honeys. New Zealand Journal of Science 18(3): 329-332.
- DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH 1986. Sticky problems in South Island beech forests. New Zealand Beekeeper 190: 28-29.
- DONOVAN,B.J.1986. Sources of exotic honeydew in New Zealand. New Zealand Beekeeper 191:31-32.
- HOLMES, N. 1982. Honeydew: an export item that comes from the bush. New Zealand Journal of Agriculture 144(6):28-29.
- JACOBSEN, F.A. 1916. Honey-dew or aphide honey. New Zealand Beekeepers' Journal 20:339-340.
- JEFFREY, G.L. 1978. Intensive beekeeping could be the means of saving west coast forests. Forest and Bird 207:6-8
- MASKELL, W.M. 1886. On the "honeydew" of Coccidae and the fungus accompanying these insects. Transactions and Proceedings of the New Zealand Institute 19:41-45.
- REID, G.M. 1979. Production of honeydew honey in New Zealand. Proceedings of the XXVII International Congress of Apiculture, Athens.

SMAELLIE, E. 1949. Use of honeydew for feeding bees in Canterbury. New Zealand Journal of Agriculture 79(4):351-352. 38/50
SMITH,J. (ed.) 1978. Papers presented at the honeydew seminar, 10 August 1978. Christchurch, Ministry of Agriculture and Fisheries, 80 pp. 981/79
SMITH,J. 1980. The production of honeydew honey from the New Zealand South Island beech forest. National Diploma in Apiculture thesis, Royal New Zealand Institute of Horticulture, 83 pp.

WALTON, G.M. 1979. Beech honeydew honey - a vast potential. New Zealand Beekeeper 40(4): 6-9. 673/81

- 34 -

5. BEEKEEPING MANAGEMENT

- (a) ECONOMICS, BOOKEEPING, TAXATION, PROFITS, COST OF PRODUCTION
- BERRY, I. 1979. The value of keeping records. New Zealand Journal of Agriculturee 138 (5): 33, 34, 36.
- BERRY, I. 1979. The use of apiary cards. New Zealand Journal of Agriculture 138 (6): 66-68.
- BRYANT, T.G. 1974. Profitable beekeeping. New Zealand Beekeeper 36 (4): 56-59.
- BRYANT, T.G. 1977. Bulk suppliers put producer/packers in the shade. New Zealand Beekeeper 38 (4): 7-8. 630L/79
- BRYANT, T.G. 1978. Honey extraction; the costs involved. New Zealand Beekeeper 39 (4): 18-19 611L/80
- BRYANT, T.G. 1980. Record keeping for beekeepers. New Zealand Beekeeper 41 (1): 9-12.
- BRYANT, T.G.; HOOK, P.J. 1977. MAF survey shows Southland apiarists sinking. New Zealand Beekeeper 39 (2): 9-10.
- COOK, V.A. 1969. Honey production and beekeeping economics. New Zealand Beekeeper 3 (1): 5-7, 17.
- COOK, V.A. 1971. Planning beekeeping profits. New Zealand Beekeeper 33 (1): 40-46.
- COOK, V.A.; CRUMP, D.K. 1969. Bigger beekeeping enterprises needed. New Zealand Journal of Agriculture 118 (2); 60-63.
- DELAHUNTY, E. 1973. Budgeting and bookkeeping. New Zealand Beekeeper 35 (4): 27-29.
- FALCONER, A.E. 1974. Estate planning today. New Zealand Beekeeper 36 (4): 53-55, 59.
- HENDERSON, V.G. 1968. The tax collector and you. New Zealand Beekeeper 30 (4): 16-20.
- HILTON, A.E. 1970. Benefits of companies and suggestions on accounting records. New Zealand Beekeeper 32 (1): 34-37.

- McCHESNEY, I.G. 1981. A survey of beekeepers' fuel use. Lincoln College, Joint Centre for Environmental Studies, 40pp.
- McCHESNEY, I. 1982. Beekeepers are big fuel users. New Zealand Beekeeper 43(1):7-8.
- MATHESON, A.G. 1982. Leasing and share farming. New Zealand Beekeeper 43(1):11-13.
- MINCHIN, R. 1974. Rural Banking and Finance Corporation. New Zealand Beekeeper 36(4):49-52.
- NATIONAL BEEKEEPERS' ASSOCIATION. 1968. Cost of production survey November 1967. New Zealand Beekeeper 30(1):28.
- NATIONAL BEEKEEPERS' ASSOCIATION. 1970. Public liability insurance. New Zealand Beekeeper 32(1):20-21.
- PATERSON, C.R. 1944. Outlay to establish 100 colonies. New Zealand Journal of Agriculture 69(3):262.
- SMITH, J. 1973. Time. New Zealand Beekeeper 35(1)30,34-35.
- WALSH, R.S. 1968. Meeting the cost factor in commercial honey production. New Zealand Journal of Agriculture 117(4):97-99 (also New Zealand Beekeeper 1968 40(4):10-15). 682L/70
- WALTON, G.M. 1972. The economics of the single-queen and two-queen systems of colony management. Palmerston North, New Zealand Ministry of Agriculture and Fisheries, 32 pp. 895/73
- WALTON, G.M. 1974. The single-queen and two-queen systems of colony management under commercial beekeeping conditions. Royal New Zealand Institute of Horticulture Journal 2:34-43.
- WALTON, G.M. 1975. The cost of operating your truck. New Zealand Beekeeper 37(2):38-42.
- WALTON, T. 1976. The Rural Banking and Finance Corporation. New Zealand Beekeeper 38(2):15-17.

5. BEEKEEPING MANAGEMENT (Continued) (b) MANAGEMENT SYSTEMS BIRD, C. 1971. New thoughts on two-queen beekeeping. New Zealand Beekeeper 33(3):45-46. Preparing hives for winter. COOK, V.A. 1964. New Zealand Journal of Agriculture 108(3):297.COOK, V.A. 1964. Preparing hives for next season. New Zealand Journal of Agriculture 108(4): 365 - 366. COOK, V.A. 1969. Wintering honey bee colonies. New Zealand Journal of Agriculture 118(2):67-69. COOK, V.A. 1980. Preparing hives for winter. Apiarist 12:1. HILLARY, P.A. 1928. The dual-queen system. New Zealand Smallholder 11(2):112-113. HOBBS, J.C. 1916. The management of out apiaries. New Zealand Beekeepers' Journal 24: 413-417. LINE, L.J.S. 1962. A system of hive management. New Zealand Beekeeper 24(2):31-33. MATHESON, A.G.; SIMPSON, K.W. 1982. Shedding the hobbyist mentality. New Zealand Beekeeper 43(2):31-32, 43(3):43-44. REID, G.M. 1980. Helping our queen bees reach their full potential. New Zealand Beekeeper 41(3):3-5. RODIE, J.E. 1953. Double-brood method of uniting beehives. New Zealand Journal of Agriculture 86(4):295. ROPE, C.G. 1962. Summer management of domestic beehives. New Zealand Journal of Agriculture 105(6):495-496. ROPE, C.G. 1962. What every beginner should know about bees. New Zealand Journal of Agriculture 104(2):145-149.

81L/87

949L/81

- STEWART, W.T. 1982. A different honey and wax system. New Zealand Beekeeper 43(2):9-10.
- TRAYNOR, J. 1884. The moveable comb system. New Zealand Country Journal 8(4):342-343.
- TRYTHALL, A.B. 1918. The "Hand" hive and system of bee management. New Zealand Journal of Agriculture 18(2):74-79.
- WALSH, R.S. 1948. Two-queen colonies can increase honey production. New Zealand Journal of Agriculture 77(2):189-191.
- WALSH, R.S. 1968. Meeting the cost factor in commercial honey production. New Zealand Journal of Agriculture 117(4): 97-99 (also New Zealand Beekeeper 30(4):10-15 1968). 682L/70
- WALTON, G.M. 1970. More honey from two-queen colonies. New Zealand Journal of Agriculture 120(2):69-71.
- WALTON, G.M. 1970. An evaluation of colony spring management methods. Palmerston North, New Zealand Ministry of Agriculture and Fisheries, 20 pp.
- WALTON, G.M. 1971. Productive colony management. New Zealand Journal of Agriculture 122(2):75-77. 208L/76
- WALTON, G.M. 1972. The economics of the single-queen and two-queen systems of colony management. Palmerston North, New Zealand Ministry of Agriculture and Fisheries, 32 pp.
- WALTON, G.M. 1974. The single-queen and two-queen systems of colony management under commercial beekeeping conditions. Royal New Zealand Institute of Horticulture Journal 2:34-43.
- WARD, A.M. 1977. Wintering in three boxes and no sugar. New Zealand Beekeeper 39(1):21-22.
- WINTLE, G.L. 1938. The dual queen system. The New Zealand Smallholder 10(11):688-689; 10(12):732-733; 11(3):172-173.

(c) ESTABLISHING AND MAINTAINING APIARIES

BERRY, I. 1979. Maintaining hive numbers. New Zealand Journal of Agriculture 139(5):65-66.

BERRY, I. 1980. Choosing a site. New Zealand Journal of Agriculture 140(4):55-56.

COOK, V.A. 1962. Drifting of bees : effect of hives placed in a circle. New Zealand Journal of Agriculture 105(5):407-410.

- COOK, V.A. 1972. The carrying capacity of beekeeping areas. New Zealand Beekeeper 34(4):16-18,2-21. 660L/75
- GRIFFIN, L.A.M. 1952. Location of apiaries in relation to honey crop returns. New Zealand Journal of Agriculture 85(3):225-226. 156/54
- JEFFERY, G.L. 1962. Selection of new apiary sites. New Zealand Journal of Agriculture 104(4):335-336.
- MATHESON, A.G. 1981. Honey bees, establishment and management, an introduction. Ministry of Agriculture and Fisheries, Wellington. 4pp (AgLink FPP 372).
- MATHESON, A.G. 1983. Beekeeping, apiary sites, how to prevent drifting. Wellington, Ministry of Agriculture and Fisheries, 3pp. (AgLink FPP 535). 214L/85
- MATHESON, A.G. 1983. Beekeeping, apiary sites, selecting and planning. Wellington, Ministry of Agriculture and Fisheries, 3 pp. (AgLink FPP 537).
- MATHESON, A.G. 1983. Beekeeping, urban areas, management to prevent nuisances. Wellington, Ministry of Agriculture and Fisheries, 2pp. (AgLink FPP 538). 197L/85
- PATERSON, C.R. 1946. Selection of sites for apiaries. New Zealand Journal of Agriculture 73(3):249-251.
- PATERSON, C.R. 1946. Control of grass around beehives. New Zealand Journal of Agriculture 73(6):584.

RODIE, J.E. 1956. The importance of bush apiaries in beekeeping. New Zealand Journal of Agriculture 92(5):425-427. 267/59
WALSH, R.S. 1970. Shelter for bee hives. New Zealand Journal of Agriculture 121(1):94-95.
WALSH, R.S. 1971. Is fully stocking often mistaken for overstocking? New Zealand Beekeeper 33(1):24-27.
WINTER, T.S. 1945. How and when to establish a domestic apiary. New Zealand Department

of Agriculture Bulletin No 247. 12 pp.

- 40 -

5. BEEKEEPING MANAGEMENT (Continued)

(d) PACKAGE BEES

GLASS, J. 1955. Some observations on package beekeeping for honey production. New Zealand Beekeeper 17(3):41-42.

- 41 -

- RIESTERER, L. 1942. Possibilities of package bees in New Zealand. New Zealand Journal of Agriculture 64(2):133,141.
- ROBERTS, D. 1957. Container for air transport of bees. New Zealand Journal of Agriculture 95(1):36-39. 678L/62
- ROBERTS, D.; FORSTER, I.W. 1953. Package bee trials. New Zealand Journal of Agriculture 87(3):207-214. 91/55
- SEAL, D.W.A. 1957. Package bees. New Zealand Journal of Agriculture 95(2):121-123. 257/59
- WESTBROOKE, G.V. 1930. Possibilities of package bees in New Zealand. New Zealand Smallholder 13(2):124-126.

6. HIVES AND HIVE PARTS

(a) DIMENSIONS AND METRICATION

BENNETT, A.W.; BRISCOE, D.A. (undated). Standard hive equipment (Langstroth type): conversion to the metric system. Hamilton, Ministry of Agriculture and Fisheries, 45 pp (and 3 pp of amendments).

- BRISCOE, D.A. 1956. Correct measurements and assembly of hive equipment essential. New Zealand Journal of Agriculture 93(1):11-14.
- BRYANT, T.G. 1983. 33 or 35, millimetre end bars, that is. Apiarist 34:3.
- BRYANT, T.G. 1984. The ten frame brood nest. Apiarist 39:6.
- BUSHBY, R.R. 1975. Let's put the squeeze on our bees. New Zealand Beekeeper 37(3):53-55.
- DAWSON, C. 1984. End bars 32, 33 mm or not at all. Apiarist 35:4.
- ECROYD, A.K. 1973. Metrication of beekeepers' equipment and its problems. New Zealand Beekeeper 35(4):40-42. 631L/74
- PATERSON, C.R. 1958. Value of standard hive equipment. New Zealand Journal of Agriculture 96(3):261-263.
- RODIE, J.E. 1964. Standard hive equipment is best. New Zealand Journal of Agriculture 109(3):237,239. 315L/65
- WALTON, G.M. 1973. Background to the metrication of beekeeping equipment. New Zealand Ministry of Agriculture and Fisheries, Palmerston North, 30 pp. 641/73
- WALTON, G.M. 1974. Proposals for the metric Langstroth hive. New Zealand Ministry of Agriculture and Fisheries, Palmerston North, 42 pp. 211/76
- WALTON, G.M. 1974. Metric measurements for the Langstroth hive. New Zealand Beekeeper 36(4):12-16. 1109L/76

WALTON, G.M. 1975. The metrication of beekeeping equipment. Bee World 56(3):109-119.
WALTON, G.M. 1977. Metrics for beekeepers. Wellington, Ministry of Agriculture and Fisheries, 12 pp.

- 43 -

6. HIVES AND HIVE PARTS (Continued)

(b) TYPES AND SUPPORTING EQUIPMENT

- BATES, K.N. 1969. The four-queen compact hive. New Zealand Journal of Agriculture 119(5): 92-93.
- BERRY, I. 1980. Home-made frames. New Zealand Journal of Agriculture 141(1):89,91-92.
- BRYANT, T.G. 1980. A plan for a bee blower. New Zealand Beekeeper 41(4):26.
- BRYANT, T.G. 1984. Migratory beekeeping equipment some trends in the Bay of Plenty. Apiarist 39:4-5.
- CAPSTICK, B.J. 1967. A bee blower New Zealand style. New Zealand Beekeeper 29(4):22-23.
- CLINCH, P.G. 1970. A battery operated bee collector. New Zealand Beekeeper 32(3):24, 26.
- COTTERELL, J.S. 1918. An ideal brood chamber. New Zealand Beekeepers Journal 2(4):55-56.
- FORSTER, I.W. 1953. Improved bee veils. New Zealand Journal of Agriculture 87(2):133.
- FORSTER, I.W. 1954. Equipment for manipulation of beehives. New Zealand Journal of Agriculture 88(3):242-245. 299/55
- FORSTER, I.W. 1959. Concrete bottom boards for beehives. New Zealand Journal of Agriculture 98(3):291-292. 369/59
- FORSTER, I.W. 1976. An all-season beehive entrance. New Zealand Beekeeper 38(1):9.
- HOBSON, J.V. 1982. Concrete hives have role to play in tropical islands. New Zealand Beekeeper 43(3):11-12.
- HOPKINS, I. 1919, 1920. Metal (aluminium) combs : a successful trial. New Zealand Fruitgrower 2(3):754-755; 2(4):807; 2(5):860; 2(8):1010-1011.
- JOHNSON, L.H. 1956. Hive covers. New Zealand Journal of Agriculture 93(4):371-375. 237/59
- JOHNSON, L.H. 1958. Asbestos cement hive covers and floor boards. New Zealand Journal of Agriculture 97(1):63-65. 301/59

- LINE, L.J.S. 1966. Modified air-flow bottom board. New Zealand Beekeeper 28(4):14-16.
- NAIRN, R.G. 1957. A reliable hive lid fastener. New Zealand Journal of Agriculture 95(1):55. 420/59
- NICHOLS, G. de la M. 1962, 1963. Plastic frame trials. New Zealand Beekeeper 24(4):28-29; 25(3):47-48. 320/65
- PALMER-JONES, T. 1959. Construction and use of cages used in beekeeping research. New Zealand Journal of Agricultural Research 2(2):242-248.
- PATERSON, C.R. 1946. Concrete hive stands made up by new method. New Zealand Journal of Agriculture 72(5):486-487.
- PATERSON, C.R. 1952. Queen excluders and their use in apiary management. New Zealand Journal of Agriculture 85(5):397-398.
- ROBERTS, D. 1951. Effective and simply made bee escape board. New Zealand Journal of Agriculture 83(2):105-106. 215/52
- ROBERTS, D. 1957. Container for air transport of bees. New Zealand Journal of Agriculture 95(1):36-39. 678L/62
- ROBINSON, D.S. 1938. Concrete blocks for hive stands. New Zealand Journal of Agriculture 56(5):373-374.
- ROBINSON, D.S 1947. Concrete hive roofs. New Zealand Journal of Agriculture 75(3):260-261.
- SEAL, D.W.A. 1958. An efficient bee escape. New Zealand Journal of Agriculture 97(3): 237. 302/59
- WESTBROOKE, G.V. 1920. Aluminium honeycombs. New Zealand Journal of Agriculture 20(2):118-119.

6.	HIVES AND HIVE PARTS (Continued)
	(c) CONSTRUCTION, ASSEMBLY AND MAINTENANCE
	BRYANT, T.G. 1977. New super-holder jug. New Zealand Beekeeper 39(1):10. 188L/79
	CLINCH, P.G. 1986. Glue in plywood toxic to bees. New Zealand Beekeeper 190:6.
	GRIFFIN, L.A.M. 1963. Improved cages and management for queen bee bank system. New Zealand Journal of Agriculture 106(4):287-289. 160/64
	HARRISON, D.L., PALMER-JONES, T.; NAIRN, R.G. 1959. Danger of using arsenic-treated timber for beehives. New Zealand Journal of Agriculture 98(4):338-339. 206/60
	IRELAND, J.P. 1935. How to make wired comb foundation. New Zealand Smallholder 17(12):559-560.
	JOHNSON, L.H. 1944. Saw-bench for making hive parts. New Zealand Journal of Agriculture 69(2):119-120.
	LINE, L.J.S. 1963. Jig for making frames for bee combs. New Zealand Journal of Agriculture 107(3):215-216. 608L/64
	PALMER-JONES, T. 1959. Construction and use of cages in beekeeping research. New Zealand Journal of Agricultural Research 2(2):242-248. 108/60
	PATERSON, C.R. 1947. Saw bench for making hive parts. New Zealand Journal of Agriculture 75(1):84-88.
	PATERSON, C.R. 1948. A light cramp for assembling hive supers. New Zealand Journal of Agriculture 76(5):475.
	PATERSON, C.R. 1950. Sharpening and maintaining beekeeping hand tools. New Zealand Journal of Agriculture 80(6):561-563.
	PATERSON, C.R.; BENNETT, A.W. 1958. Beekeeper's saw bench. New Zealand Journal of Agriculture 96(2):133-148. 268/59

ROBERTS, D. 1950. Maintenance of hive equipment. New Zealand Journal of Agriculture 90(4):411-413.
ROBINSON, D.S. 1948. How to make and use an observation beehive. New Zealand Journal of Agriculture 76(1):85-87.
VAN EATON, C. 1986. For a change a simple super jig. New Zealand Beekeeper 190:18.
WALLINGFORD, N. 1984. Jig for assembling supers. New Zealand Beekeeper 181:28.
WILLIAMS, T.P.J. 1954. Repairing a bee smoker. New Zealand Journal of Agriculture 88(1):49.

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6. HIVES AND HIVE PARTS (Continued) (d) PRESERVATION AND PAINTING COOK, V.A. 1968. Preserving beehive parts with paraffin wax. New Zealand Journal of Agriculture 117(1):60-61; 63,65.694/70 COOK, V.A. 1973. Improved device for preserving hive parts. New Zealand Beekeeper 35(1):42-43. CROSS, D.J. 1982. Extending the service life of beehives. Apiarist 26:3. CROSS, D.J. 1983. Preservative treatments of wood used in hives. Bee World 64(4):169-174. 574/84 HARRISON, D.L.; PALMER-JONES, T.; NAIRN, R.G. 1959. Danger of using arsenic-treated timber for beehives. New Zealand Journal of Agriculture 98(4):338-339. 206/60 JOHNSON, L.H. 1954. Timber preservation for Pinus radiata hives. New Zealand Journal of Agriculture 88(2):105-109. 22/60 LINE, L.J.S. 1953. Preserving hive parts with paraffin wax. New Zealand Journal of Agriculture 87(3):249-250. 159/55 LINE, L.J.S. 1964. Method of preserving hive boxes with paraffin wax. New Zealand Journal of Agriculture 109(4):329-331. 785/65 MATHESON, A.G. 1980. Easily-constructed paraffin wax dipper New Zealand Beekeeper 41(4):11-12. 192L/82 Simple method of holding bee PATERSON, C.R. 1960. supers during painting. New Zealand Journal of Agriculture 100(4):361. 116B/60 REID, G.M.; MATHESON, A.G. 1978. Waikato version of a paraffin wax dipper. New Zealand Beekeeper 39(2):27-28. 137L/79 ROBINSON, D.S. 1939. Paraffin wax for preserving hive parts. New Zealand Journal of Agriculture 58(1):79.

ROBINSON, D.S. 1948. Effect of roof colour on hive temperatures. New Zealand Journal of Agriculture 77(5):509.

- 49 -

WILLIAMS, D. 1980. Preserving beehive timber. New Zealand Beekeeper 41(4):13.

7. FEEDING HONEY BEES

(a) SUGAR AND HONEY

- BERRY, I. 1978. Spring feeding. New Zealand Journal of Agriculture 136(10):48-49,51.
- BERRY, I. 1983. Feeding dry sugar. New Zealand Beekeeper 178:25.
- COOK, V.A. 1963. Feeding bees. New Zealand Journal of Agriculture 107(5): 455, 462.
- FORSTER, I.W. 1972. Feeding sugar to honey bee colonies. New Zealand Beekeeper 34(1):15-18. 996L/72
- FORSTER, I.W. 1976. Effect of feeding dry refined and raw cane sugar to honey bee colonies. New Zealand Beekeeper 38(1):7.
- JACOBSEN, F.A. 1913. Bees: feeding and feeders. New Zealand Department of Agriculture. Bulletin. 39 (new series), 8 pp. (also New Zealand Journal of Agriculture 6(3):321-324).
- REID, G.M. 1969. Winter feeding in the honey bee <u>Apis</u> <u>mellifera</u> L. with special reference to the qualitative and quantitative effects of feeding sugar syrup. B.Sc.(Hons) thesis, Auckland University. 101 pp.
- REID, G.M. 1974. The inside story of feeding sugar to bees. New Zealand Beekeeper 36(2):41-43. 1114L/76
- ROBINSON, D.S. 1946. Bottle-type feeder for feeding bees. New Zealand Journal of Agriculture 73(2):120.
- ROPE, C.G. 1971. Dry sugar is good for bee feed. New Zealand Beekeeper 33(1):27.
- SMAELLIE, E. 1949. Use of honeydew for feeding bees in Canterbury. New Zealand Journal of Agriculture 79(4):351-352. 38/50
- WALLINGFORD, N. 1976. To feed or not to feed. New Zealand Beekeeper 38(3):13-16. 1270L/77
- WALSH, R.S. 1949. Candy as emergency food for bees. New Zealand Journal of Agriculture 78(6):609-610.

WALSH, R.S. 1965. The food and economic value of various types of sugar in bee feeding. New Zealand Beekeeper 27(4):20-21.
WALSH, R.S. 1969. Test feeding of industrial sugar on

WALSH, R.S. 1969. Test feeding of industrial sugar on Rangitoto Island, Auckland, and at Oamaru, Otago. New Zealand Beekeeper 31(4):16-17.

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7. FEEDING HONEY BEES (Continued)

(b) POLLEN AND POLLEN SUBSTITUTES

- ALLEN, L. 1979. In praise of pollen. New Zealand Journal of Agriculture 139(6):47,49.
- BRYANT, T.G. 1974. Pollen substitute : soya bean flour mixture field trial. New Zealand Beekeeper 36(1):27-30. 1116L/76
- BRYANT, T.G. 1982. Spring pollen feeding. New Zealand Beekeeper 43(2):23-24.
- FORSTER, I.W. 1966. Pollen supplements for honey bee colonies. New Zealand Beekeeper 28(3):14-21. 248/68
- FORSTER, I.W. 1968. Pollen supplements for honey bee colonies. New Zealand Beekeeper 30(2):2-8; 30(3):16-17.

166/71,167/71

- MATHESON, A.G. 1982. Autumn pollen feeding. New Zealand Beekeeper 43(1):27-29.
- PALMER-JONES, T. 1947. Use of pollen supplements in New Zealand. New Zealand Journal of Agriculture 75(2):147-150.
- REID, G.M. 1973. Use of pollen supplements for feeding bees. New Zealand Beekeeper 35(4):43-46.
- WALSH, R.S. 1971. Winter storage of pollen combs for spring use. New Zealand Beekeeper 33(2):32-33.

REARING, BREEDING AND MANAGING QUEEN BEES 8. (a) REARING BERRY, I. 1979. The most important bee. New Zealand Journal of Agriculture 138(1):31,33. BERRY, I. 1979. Raising gueen cells - Greek style. New Zealand Journal of Agriculture 138(2): 53-54. BERRY, I. 1980. Requeening: why I prefer to do it in autumn. New Zealand Journal of Agriculture 140 (1):45-46. BERRY, I. 1983. Arataki team opts for autumn requeen. New Zealand Beekeeper 180:12-14. BLOXHAM, L. 1970. Royal export drive: production. New Zealand Journal of Agriculture 120(2):67. CLOAKE, H. 1977. Queen cell raising - my way. Proceedings of the XXVIth International Apicultural Congress, Adelaide. pp 204-206. 203L/79 COOK, V.A. 1963. Using a bee colony for queen cell raising without impairing honey production potential. New Zealand Journal of Agriculture 107(4):334,340. 363/64 COOK, V.A. 1968. Bee house has advantages when raising queen cells. New Zealand Journal of Agriculture 116(6):54-55. COOK, V.A. 1986. Queen rearing simplified. Geddington UK, British Bee Publications, 63 pp. (Describes a method developed in New Zealand). 1250/86 DAWSON, C. 1978. Queen cell raising in gueenright colonies under supersedure impulse. New Zealand Beekeeper 39(4):28-30. DAWSON, C. 1979. Queen rearing colonies. New Zealand Beekeeper 40(4):16-18. FORSTER, I.W. 1956. Use of swarm box in raising queen cells. New Zealand Journal of Agriculture 93(5):449-451. 272/59 GRIFFIN, L.A.M. 1966. It pays to take extra care when raising queen bees. New Zealand Journal of Agriculture 113(2):85-87.

HOPKINS, I. 1919. Horizontal-comb method of queen rearing. Bee World 1(7):143-144. JACOBSEN, F.A. 1912. Necessity for queen rearing : the Swarthmore system, the Alley system and queen nurseries. New Zealand Journal of Agriculture 5(3):265-269. JOHNSON, L.H. 1951. Improved methods of queen rearing. New Zealand Journal of Agriculture 82(2):140-142. 41/53 KLEINSCHMIDT, G.J. 1981. Factors in gueen rearing that influence the potential of a queen bee. New Zealand Beekeeper 42(1):27-28. PATTISON, P. 1970. Royal export drive: the market. New Zealand Journal of Agriculture 120(2):66. PEARSON, T.E. 1949. This gueen-rearing business. New Zealand Beekeeper 11(4):27-28. ROBERTS, D. 1958. Simplified queen bee rearing. New Zealand Journal of Agriculture 96(4):319-324, 96(5):486-489.ROPE, C.G. 1963. First attempts at queen rearing. New Zealand Journal of Agriculture 106(2):147-149.STANLEY, B. 1981. Making it as a medium sized gueenrearing operator. New Zealand Beekeeper 42(2):19-20. WALTON, G.M. 1971. Young brood essential for good grafts. New Zealand Beekeeper 33(4):40. WALTON, G.M. 1975. 1974 queen bee utilisation survey. New Zealand Beekeeper 37(3):45-48. WALTON, G.M. 1980. The prospects for boosting queen bee production. New Zealand Beekeeper 41(3):30-31.1383L/81

8. REARING, BREEDING AND MANAGING QUEEN BEES (Continued)

(b) BREEDING

- BRAY, W.B. 1910. Profitable beekeeping. New Zealand Journal of Agriculture 1(4):265-268. (An inquiry into breeding and requeening as factors).
- COTTERELL, J.S. 1914. How to increase the honey crop: importance of young queens introduced at the right time. New Zealand Beekeepers' Journal 2:29-33.
- FORSTER, I.W. 1967. Bee breeding. New Zealand Beekeeper 29(1):2-5. 347L/67
- FORSTER, I.W. 1975. An evaluation of various characteristics in three lines of New Zealand honey bees. New Zealand Journal of Experimental Agriculture 3(3):293-297. 1273/77
- HOPKINS, I. 1914. Improving our bees. New Zealand Beekeepers' Journal 3:54-55.
- IRVING, J. 1921. Breeding for more honey. New Zealand Beekeepers' Journal 5(10):172.
- KLEINSCHMIDT, G.J. 1981. Breeding systems for stock improvement. New Zealand Beekeeper 42(1):29-30.
- MATHESON, A.G. 1986. The effects of inbreeding on brood viability and the honey crop. New Zealand Beekeeper 189:8-9.
- NATIONAL BEEKEEPERS' ASSOCIATION. 1966. Queen breeding co-operative society. New Zealand Beekeeper 28(4):6-7.
- NATIONAL BEEKEEPERS' ASSOCIATION. 1967. Queen breeding project. New Zealand Beekeeper 29(3):7.
- NEW ZEALAND BEEKEEPER. 1949, 1950. New Zealand queen breeders' society. New Zealand Beekeeper 11(4):7:12(3):15.
- PALMER-JONES, T. 1965. Importation of honey bees in immature stages. New Zealand Beekeeper 27(3):16-19.
- PALMER-JONES, T; MILLER, G.E. 1950. Improving strains of bees by artificial insemination. New Zealand Journal of Agriculture 81(2):101-108.

REID, G.M. 1973. Role of the drone honey bee. New Zealand Journal of Agriculture 127(4):47-50.
REID, G.M. 1973. Drones, the forgotten caste. New Zealand Beekeeper 35(2):37-40; 35(3):62-64.
TINSLEY, J. 1951. The importance of the drone. New Zealand Beekeepers' Journal 9:153-154.
VAN EATON, C. 1986. Determinants of queen quality in New Zealand commercial queens. New Zealand Beekeeper 192:28-30.
WALTON, G.M. 1975. 1974 queen bee utilisation survey. New Zealand Beekeeper 37(3):45-48.
WINTER, T.S. 1949. Improvement of bee stocks in New Zealand. New Zealand Journal of Agriculture 79(6):553.

- 56 -

8. REARING, BREEDING AND MANAGING QUEEN BEES (Continued)

(c) NUCLEUS HIVES

- BATES, A.R. 1922. Nuclei management. New Zealand Beekeepers' Journal 6(7):117-118.
- BRISCOE, D.A. 1976. The value of nucleus hives in commercial apiaries. New Zealand Beekeeper 38(1):27-28. (a revision of New Zealand Journal of Agriculture 1963 107(4):310-311 [1963]) 358/64
- CLINCH, P.G.; TEN HOUTEN, A. 1986. Supering mating boxes for pollen tests. New Zealand Beekeeper 190:20.
- COMPTON, D.A. 1986. Recycling. New Zealand Beekeeper 189:18-19. (Making nucleus hives from package containers).
- COOK, V.A. 1974. Miniature hives for bees. New Zealand Journal of Agriculture 128(6):43-45. 234L/77
- DAWSON, C. 1985. Overwintering nucleus colonies. Apiarist 43:4-5.
- GODDARD, R. 1953. Value of nucleus hives in commercial apiaries. New Zealand Journal of Agriculture 86(5):433-435. 299/54
- JACOBSEN, F.A. 1912. Mating boxes. New Zealand Journal of Agriculture 5(1):50-51.
- MARSHALL, P.W. 1971. Disposable "nuc" is beekeeper's timesaver. New Zealand Journal of Agriculture 123(5):62.
- PATERSON, C.R. 1941. Establishing nucleus colonies. New Zealand Beekeeper 3(2):1-2.

8. REARING, BREEDING AND MANAGING QUEEN BEES (Continued)

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		(d)	QUEEN	BEE IN	TRODUCTION	
FORSTER,	I.W.	with	nout de	queenin	honey bee colon g. New Zealand esearch 15(2):41	Journal
HAINES, I	M. 198			introdu 43(3):3	ction. New Zeal 7-38.	and
JACOBSEN	, F.A.	col0	onies w	ith a l	ng queen cells t aying queen. New lture 10(1):74.	
LATHAM, A	A. 192	100%	6 succe		ction: can it be New Zealand Bee 110.	
PEER, D.	1984.	. Re tech	equeeni nnique.	ng with Apiari	queen cells - a st 40:3.	new
REID, G.I	M. 197	dequ Proc Apic	ueening ceeding	using s of th	ney bee colonies protected queen e XXVIth Interna ess, Adelaide, p	cells. tional
REID, G.	M. 197	dequ	ueening	using	ney bee colonies protected queen eper 40(3):15-17	cells.
SEAL, D.	W.A. 1	Zeal		urnal o	n of queen bees. f Agriculture	New
SIMPSON,	K.W.	Boor		New Ze	without dequeeni aland Beekeeper	ng in
WALLINGF	ORD, M				hod of requeenin 38(3): 19-20.	g. New
WALLINGF	ORD, M	intr			queen bees befor Zealand Beekeep	

8. REARING, BREEDING AND MANAGING QUEEN BEES (Continued) (e) QUEEN BEE STORAGE BENTON, Y.H. 1920. The Benton nursery incubator. New Zealand Beekeepers' Journal 4(8):137-138. COOK, V.A. 1968. Wintering gueen bees by Rumanian method has promising look. New Zealand Journal of Agriculture 117(2):54-57 (also New Zealand Beekeeper 1969 31(2):10-12). 974L/70 DAWSON, C. 1962. Queen reservoirs. New Zealand Beekeeper 24(1):24-25,30. FORSTER, I.W. 1971. The effect of air or surface mailing of queen bees on subsequent breeding, honey production, and queen supersedure. New Zealand Journal of Agricultural Research 14(4): 951-953. GRIFFIN, L.A.M. 1963. Improved cages and management for queen bee bank system. New Zealand Journal of Agriculture 106(4):287-289. 160/64 GRIFFIN, L.A.M. 1966. Advances made with gueen banks in South Island. New Zealand Journal of Agriculture 113(5):41. REID, G.M. 1975. Storage of gueen honeybees. Bee World 56(1):21-31. 419L/75 SEAL, D.W.A. 1961. Storage of gueen bees. New Zealand Beekeeper 23(1):24. 286L/62 WALSH, R.S. 1947. Successful wintering of bees. New Zealand Journal of Agriculture 74(4):383-384. WALSH, R.S. 1967. An experiment with gueen banks. New Zealand Beekeeper 29(4):14-17. WALSH, R.S. 1969. Can anything be done to reduce queen losses after caging? New Zealand Beekeeper 31(4):10-12. 391/73

- 59 -

REARING, BREEDING AND MANAGING QUEEN BEES (Continued) 8. FINDING, HANDLING, MARKING, (f) CAGING AND SHIPPING BEES BLOXHAM, L. 1970. Queen bees for Canada: production. New Zealand Journal of Agriculture 120(2):67. BRYANT, T.G. 1981. Queen honey bees to Canada. Apiarist 17:2. CLINCH, P.G. 1970. A battery operated vacuum bee collector. New Zealand Beekeeper 32(3):24-26. 365L/72 CLINCH, P.G. 1971. A battery-operated vacuum device for collecting insects unharmed. New Zealand Entomologist 5(1):28-30. 852L/72 CLINCH, P.G. 1973. Vacuum collecting of bees in polystrene queen cages. New Zealand Beekeeper 35(2):52-53. 366/74 COOK, V.A. 1963. Finding a queen is not a difficult operation. New Zealand Journal of Agriculture 107(3):245-248. COOK, V.A. 1968. Severe clipping of queens' wings increases supersedure rate. New Zealand Beekeeper 30(3):32. 644/71 COOK, V.A. 1971. Finding queen bees. New Zealand Journal of Agriculture 122(5):28-29. COOK, V.A. 1974. Handling gueen bees. New Zealand Journal of Agriculture 128(3):37. FORSTER, I.W. 1971. Effect of clipping queen honey bees' wings. New Zealand Journal of Agricultural Research 14(2):535-537. 445/72 FORSTER, I.W. 1971. The effect of air or surface mailing of queen bees on subsequent breeding, honey production and queen supersedure. New Zealand Journal of Agricultural Research 14(4):951-953. NAIRN. R.G. 1953. New method of marking bees. New ZealandJournal of Agriculture 86(6):529.

48/55

NEW ZEALAND BEEKEEPER. 1968. Problems : the New Zealand view of shipment of queens to Canada. New Zealand Beekeeper 30(3):1. 418L/71
PATTISON, P. 1970. Queen bees for Canada. New Zealand Journal of Agriculture 120(2):66.
RICHARDSON, S. 1970. New Zealand queens 'the greatest'. New Zealand Beekeeper 32(4):16-21.
ROBERTS, D. 1957. Container for air transport of bees. New Zealand Journal of Agriculture 95(1):36-39.
WALLINGFORD, N. 1983. Queen marking has its merits.

New Zealand Beekeeper 180:11.

- 61 -

- 9. HIVE MANIPULATIONS
 - (a) LIFTING, MOVING HIVES AND HIVE PARTS; VEHICLES
 - BARTRUM, F.A.; GODDARD, R. 1954. Two mechanical hive loaders. New Zealand Journal of Agriculture 89(3):252-255. 175/56
 - BERRY, I. 1979. Beekeepers in the bogs. New Zealand Journal of Agriculture 139(4):87-89.
 - BERRY, I. 1979. The long and short of shifting bees. New Zealand Journal of Agriculture 139(6):39-40.
 - BERRY, I. 1980. Mechanical aids. New Zealand Journal of Agriculture 140(3):63-64.
 - BERRY, I. 1982. Palletised hives for orchard pollination. New Zealand Beekeeper 43(4):14-15. 245L/85
 - BRYANT, T.G. 1977. Tail-gate loader helps southern beekeeper. New Zealand Beekeeper 38(4):10-11. 181L/79
 - COOK, V.A. 1967. Mechanisation is increasing efficiency of beekeeping. New Zealand Journal of Agriculture 115(2):92-97.
 - COOK, V.A. 1974. New beehive loader. New Zealand Journal of Agriculture 129(1):26-27. 223L/77
 - DAWSON, C.; WARD, D.L. 1959. The beekeeper's other man. New Zcaland Beekeeper 21(2):28-29,32.
 - DE LACY, H. 1977. Beekeeper's back-to-front minitractor with forklift. New Zealand Farmer 98(8):36,37,39.
 - FORSTER, I.W. 1948. Preparing and packing colonies of bees for transport. New Zealand Journal of Agriculture 76(6):541-542.
 - HOLMES, N. 1982. Lifting hives made easy. New Zealand Journal of Agriculture 144(6):29.
 - LINE, L.J.S. 1960. Moving hives that are not beetight. New Zealand Journal of Agriculture 101(4): 355-356. 178/61

- MATHESON, A.G. 1978. Making the job easier. 1. The Robinson hydraulic super lifter. 2. The Finlay-Mitchell lever lifter. New Zealand Beekeeper 39(3):18-19.
- MATHESON, A.G. 1981. Single-wheeled hive barrow speeds hive moving. New Zealand Beekeeper 42(2):29.
- NAIRN, R.G. 1955. A folding wheelbarrow for moving beehives. New Zealand Journal of Agriculture 90(3):307,309,310. 121/57
- PATERSON, C.R. 1945. Transport of bees and equipment. New Zealand Journal of Agriculture 71(1):83-84.
- POOLE, R. 1972. Mechanisation : why, when, what and how. New Zealand Beekeeper 34(4):21,37.
- REID, G.M. 1976. New hive cracker and lifter. New Zealand Beekeeper 38(4):9. 1326L/80
- REID, G.M. 1976. Shifting pallets of beehives by tractor. New Zealand Beekeeper 38(4):23-25.
- REID, G.M. 1976. Palletised beehives speed site changing. New Zealand Journal of Agriculture 133(4): 15,17-18. 1257/78
- REID, G.M. 1977. Canterbury beekeeper uses Hiab loader for handling beehives on pallets. New Zealand Beekeeper 39(1):13-16. 233/78
- ROBERTS, D. 1956. Moving a bee colony. New Zealand Journal of Agriculture 92(1):53-56.
- ROBERTS, D. 1958. A hive barrow aids handling of hives and supers. New Zealand Journal of Agriculture 96(1):82-84. 203/59
- SCHRADER, M. 1985. Easy rider takes on the spring work. New Zealand Beekeeper 188:12.
- VARDY, S.C. 1985. The right equipment for the job (Palfinger loader). New Zealand Beekeeper 186:23-24. 598L/86
- WALLINGFORD, N. 1983. Preparing to meet the problems of shifting hives. Apiarist 34:8.

WALLINGFORD, N. 1984. Knot tying for beekeepers. New Zealand Beekeeper 181:26-27.

- 64 -

WALTON, G.M. 1975. The cost of operating your truck. New Zealand Beekeeper 37(2):38-42. - 65 -

9. HIVE MANIPULATIONS (Continued)

(b) SWARM CONTROL

BERRY, I. 1978. Supering and swarm control. New Zealand Journal of Agriculture 137(11):66-68.

BRISCOE, D.A. 1966. Swarm control of bees. New Zealand Journal of Agriculture 112(1):31-32.

- DAVIDSON, R. 1966. Some observations on swarming. New Zealand Beekeeper 28(1):12-15.
- FORSTER, I.W. 1969. Swarm control in honey bee colonies. New Zealand Journal of Agricultural Research 12(3):605-610. 966/71
- FORSTER, I.W. 1969. Swarming and its control. New Zealand Beekeeper 31(4):4-9. 967L/71
- HOBBS, R.H. 1960. Swarming and swarm control. New Zealand Journal of Agriculture 101(5):371-373.
- JACOBSEN, F.A. 1912. The "Hand" swarm-controlling hive. New Zealand Journal of Agriculture 4(5):396.
- NICHOLS, G. de la M. 1961. Electronic swarm detection. Australian Beekeeper 63(2):39-41. 567L/63
- ROPE, C.G. 1962. Dealing with the swarming instinct in bees. New Zealand Journal of Agriculture 105(5):417-419.

- 66 -

9. HIVE MANIPULATIONS (Continued)

(c) REMOVING BEES FROM BUILDINGS; FERAL COLONIES

BENNETT, A.W. 1965. How to remove bee swarms from wall of building. New Zealand Journal of Agriculture 111(6):63.

COOK, V.A. 1964. Destroying wild hives. New Zealand Journal of Agriculture 108(1):65-69.

COOK, V.A. 1972. The wild hive menace. New Zealand Journal of Agriculture 124(1):46.

LINE, L.J.S. 1954. Destruction of wild colonies of bees. New Zealand Journal of Agriculture 89(4):343-348.

LINE, L.J.S. 1958. Frameless hives cause trouble and loss. New Zealand Journal of Agriculture 97(2):170.

MATHESON, A.G. 1981. Honey bees, swarms and feral colonies, eradication. Wellington, Ministry of Agriculture and Fisheries, 3 pp (AgLink FPP 392).

REID, G.M. 1981. Removing bees from honey houses. New Zealand Beekeeper 42(2):11. 611L/82

SMAELLIE, E. 1948. Bees in irregular shelters a danger to industry. New Zealand Journal of Agriculture 77(1):27-28. 9. HIVE MANIPULATIONS (Continued)

(d) WAX MOTH CONTROL

- BRISCOE, D.A. 1965. Wax moth control in bee combs. New Zealand Journal of Agriculture 111(7):36.
- CLINCH, P.G. 1968. Wax moth control. New Zealand Beekeeper 30(3):31.
- MATHESON, A.G. 1980. Wax moths and the beekeeping industry in New Zealand. National Diploma in Apiculture thesis, Royal New Zealand Institute of Horticulture, 94 pp. 1393/81
- MATHESON, A.G. 1980. Breakthrough in wax control in bee combs and comb honey. New Zealand Beekeeper 41(4):15-18.
- MATHESON, A.G. 1981. Beekeeping, wax moths, life history and control. Wellington, Ministry of Agriculture and Fisheries, 3 pp (AgLink FPP 536). 610L/83
- MATHESON, A.G. 1984. Current developments in greater wax moth control. New Zealand Beekeeper 183:24-26. 1283L/85
- MILLER, E.S. 1965. Bacillus thuringiensis of no value in controlling lesser wax moth in stored honey combs. New Zealand Journal of Agriculture 110(1):63.
- MILNES, B.M. 1975. Care in the use of methyl bromide. New Zealand Beekeeper 37(1):15-16.
- PATERSON, C.R. 1945. Larger wax moth control. New Zealand Journal of Agriculture 70(5):537-538.
- PATERSON, C.R.; BENNETT, A.W. 1963. Methyl bromide control of wax moth in bee combs. New Zealand Journal of Agriculture 106(3):230-236. 149/64
- ROBERTS, D. 1959. Control of wax moth in stored comb honey and bee combs. New Zealand Beekeeper 21(3):41-45.
- ROBERTS, D.; SMAELLIE, E. 1958. Control of wax moth on comb honey and stored bee combs. New Zealand Journal of Agriculture 97(5):464-465, 467-468. 370/59

SMITH, W.W. 1894. The honey moth. New Zealand Country Journal 18:12-14.WINTER, T.S. 1938. Protecting bee-combs from wax-moth.

- 68 -

WINTER, T.S. 1938. Protecting bee-combs from wax-moth. New Zealand Journal of Agriculture 57(6): 527-528. 9. HIVE MANIPULATIONS (Continued)

(e) HIVE MANIPULATIONS GENERAL

ANONYMOUS. 1984. Mr I Hopkins transferring and handling bees. Apiarist 37:4-5. (Reprinted from the 'New Zealand Graphic', 17 January 1903).

BERRY, I. 1979. Avoiding stings. New Zealand Journal of Agriculture 139(2):42,44.

BERRY, I. 1979. The spring inspection. New Zealand Journal of Agriculture 139(3):43-45.

BERRY, I. 1979. Preparing hives for winter. New Zealand Journal of Agriculture 138(3):38-40.

BERRY, I. 1980. Harvesting the honey. New Zealand Journal of Agriculture 140(2):52-53.

BYERS, J.S. 1969. Making full use of the lower brood chamber. New Zealand Journal of Agriculture 118(2):64-65.

- COOK, V.A. 1964. Preventing robbing. New Zealand Journal of Agriculture 108(2): 173-175.
- COOK, V.A. 1970. Puff ball control of bees. New Zealand Journal of Agriculture 120(5):72-73,75. 189/74
- DAVIDSON, R. Jnr. 1965. How to use benzaldehyde. New Zealand Beekeeper 27(1):6-7.
- JOHNSON, L.H. 1953. Effect of dampness on bees and apiary equipment. New Zealand Journal of Agriculture 87(5):465-466.
- ROBERTS, D. 1951. Combating hive moisture. New Zealand Journal of Agriculture 82(1):33-34.
- ROBERTS, D. 1956. Prevention and control of robbing by bees. New Zealand Journal of Agriculture 92(2):173-176.
- RODIE, J.E. 1953. Double-brood method of uniting beehives. New Zealand Journal of Agriculture 86(4):295.
- TRYTHALL, A.B. 1918. The "Deadman" super clearer system. New Zealand Journal of Agriculture 16(4):203-205.
- WALSH, R.S. 1965. Ways of taking off honey. New Zealand Journal of Agriculture 110(2):167-169. 800/65

10. HONEY BEE DISEASES AND PESTS

(a) DISEASES AND PESTS : GENERAL

- ANDERSON, D.L. 1985. Viruses of New Zealand honey bees. New Zealand Beekeeper 188:8-10. 242L/87
- APICULTURAL SECTION. 1984. Honey bees, overseas diseases and pests, features and potential damage. Wellington, Ministry of Agriculture and Fisheries, 4 pp (AgLink FPP 428). (Revised edition of Walton 1980).
- HOPKINS, I. 1887. Disease amongst bees. New 7ealand Country Journal 11(5):423-426.
- KIRKER, G.S. 1939. Disease control: twenty years ago and now. New Zealand Beekeeper 1(3):12-16.
- MATHESON, A.G. 1985. Recent research into half-moon disorder of honey bees. New Zealand Beekeeper 188:15.
- PALMER-JONES, T. 1949. Diseases of bees in New Zealand. New Zealand Journal of Agriculture 79(5):483-486. 77/50
- PALMER-JONES, T. 1964. Diseases of honey bees in New Zealand. New Zealand Entomologist 3(3):41-44. 156L/66
- WALTON, G.M. 1979. Brood disease threatens honey industry. New Zealand Journal of Agriculture 139(3):45.
- WALTON, G.M. 1980. Honeybees, overseas pests and diseases, features and potential damage. Ministry of Agriculture and Fisheries, Wellington, 4 pp (AgLink FPP 428).

217L/82

- WALTON, G.M. 1981. What happens if threats become realities? New Zealand Beekeeper 42(4):12-15.
- WINTER, T.S. 1942. Identification of bee diseases. New Zealand Journal of Agriculture 65(4):239.
- WINIER, I.S. 1949. Bee diseases. Wellington. New Zealand Department of Agriculture Bulletin No. 242, 24 pp.
- WINTER, T.S. 1950. Survey of disease inspection measures. New Zealand Beekeeper 12(3):16.

10. HONEY BEE DISEASES AND PESTS (Continued)

- CLINCH, P.G. 1971. Examination of bees from Tonga reveals a new ascid mite. New Zealand Beekeeper 33(4):4-6. 1013/72
- CLINCH, P.G. 1974. Observations on the incidence of <u>Nosema</u> disease of honey bees. New Zealand Journal of Experimental Agriculture 2(4): 451-453. 832/76
- CLINCH, P.G. 1976. A rapid method of examining honey bees individually for <u>Nosema</u> spores. New Zealand Journal of Experimental Agriculture 4(1):125-126.
- CLINCH, P.G. 1976. Observations on the seasonal incidence of external mites <u>Acarapis</u> spp. on honey bees. New Zealand Journal of Experimental Agriculture 4(2):257-258. 1301/77
- CLINCH, P.G. 1977. A method of controlling the external mite <u>Acarapis</u> <u>externus</u> Morgenthaler on honey bees. Proceedings of the XXVIth International Congress of Apiculture, Adelaide, Australia, pp 445-447.
- CLINCH, P.G. 1979. Nosema apis and mites in honeybee colonies in Papua New Guinea. Journal of Apicultural Research 18(4):298-301. 238/81
- CLINCH, P.G. 1979. Control of <u>Acarapis externus</u> Morgenthaler: further tests to determine the efficacy of pesticides fed in sugar syrup to infested honey bees. New Zealand Journal of Experimental Agriculture 7(4):407-409. 243/81
- CLINCH, P.G.; FAULKE, J. 1977. Toxicity to the external mite <u>Acarapis</u> <u>externus</u> Morgenthaler of pesticides fed in sugar syrup to infested honey bees. New Zealand Journal of Experimental Agriculture 5(2):185-187.
- CLINCH, P.G.; FAULKE, J. 1977. Wallaceville researchers develop system for controlling external mites on honey bees. New Zealand Beekeeper 38(4):25-26.

⁽b) ADULT BEE DISEASES AND PESTS

- CLINCH, P.G.; ROSS, J.G.M. 1970. External acarine mites, <u>Acarapis</u> spp. (Acarina : Trombidiformes) on honey bees in New Zealand. New Zealand Entomologist 4(3):136-137. 432/71
- COOK, V.A.; BOWMAN, C.E. 1983. <u>Mellitiphis alvearius</u>, a little-known mite of the honeybee colony, found on New Zealand bees imported into England. Bee World 64(2):62-64. 281L/84
- CUMBER, R.A. 1948. <u>Malpighamoeba</u> <u>mellifica</u> Prell., a disease of the adult honey bee previously unrecorded in New Zealand. New Zealand Science Review 6:85.
- DELFINADO, M.D.; BAKER, E.W. 1974. A new record for the mite <u>Mellitiphis</u> in New Zealand. Bee World 55(4): 148-149.
- DONOVAN, B.J. 1984. Additional records of birds consuming bees. Apiarist 37:5.
- MANSEN, D.C.M. 1974. A new genus and species of mesostigmatid mite (Acarina : Ameroseiidae) associated with honey bees from Tonga. Journal of the Royal Society of New Zealand 4(2):115-122.
- MATHESON, A.G. 1985. Controlling <u>Nosema</u> levels in queen bees in mailing cages. New Zealand Beekeeper 187:8.
- PALMER-JONES, T. 1947. Nosema apis recognised as the cause of spring dwindling in bee colonies. New Zealand Journal of Agriculture 74(1):48.
- PALMER-JONES, T. 1960. Discovery of harmless acarine mites in New Zealand. New Zealand Beekeeper 22(4):13.
- PALMER-JONES, T. 1961. Tarsonemid (Scutacarid) mites and honey bees. New Zealand Entomologist 2:50.
- PALMER-JONES, T. 1967. Nosema apis. New Zealand Beekeeper 29(2):4-7. 553/67
- PALMER-JONES, T. 1970. Causes of adult honey bee mortality in New Zealand. New Zealand Beekeeper 32(3):16-20. 449L/72

PALMER-JONES, T. 1970. Preventive feeding of fumagillin to control <u>Nosema apis</u> in special cases. New Zealand Beekeeper <u>32(3):28-29,45</u>.

PALMER-JONES, T.; ROBINSON, D.S. 1951. Observations on the treatment of <u>Nosema</u> apis with drugs. New Zealand Journal of Science and Technology (A) 32(6):28-38. 195/54

- WALTON, G.M. 1973. Nosema apis: how do honey bees become infected? New Zealand Beekeeper 35(2):48-49.
- WATERS, R. 1922. The nosema disease of bees. New Zealand Journal of Agriculture 24(4):222-223.

- 73 -

10. HONEY BEE DISEASES AND PESTS (Continued)

- ADVISORY SERVICES DIVISION. 1981. American brood disease, in honey bees, significance and control. Wellington, Ministry of Agriculture and Fisheries, 2 pp (AgLink FPP 124).
- ADVISORY SERVICES DIVISION. 1986. MAF chalkbrood policy clarified. New Zealand Beekeeper 190:29.
- BRAY, W.B. 1910. Foul-brood in bees, and its treatment. New Zealand Journal of Agriculture 1(2):85-91.
- BRYANT, T.G. 1980. Why we should not use drugs to control <u>Bacillus</u> larvae. Apiarist 13:3. 1405L/81
- CAMPBELL, J.A. 1924. The Hutzelman treatment of foulbrood in bees. New Zealand Journal of Agriculture 29(5):339.
- COOK, V.A. 1971. The foul-brood problem. New Zealand Journal of Agriculture 122(3):53-54.
- EARP, E.A. 1913. Diseased colonies. New Zealand Journal of Agriculture 7(5):545-546.
- EARP, E.A. 1925. American foul-brood in bees and its treatment. New Zealand Journal of Agriculture 30(2):113-117. (Also Wellington, New Zealand Department of Agriculture bulletin No. 119 revised edition 1928, 5 pp).
- FORSTER, I.W. 1948. Foul-brood of bees and its control. New Zealand Journal of Agriculture 77(4):389-392.
- GRIFFIN, L.A.M. 1953. Sac-brood: the need for better bees. New Zealand Journal of Agriculture 87(4):349-351. 233/54
- GRIFFIN, L.A. 1955. How American foul-brood disease can spread. New Zealand Journal of Agriculture 91(3):265-269. 168/59
- HOBBS, J.C. 1916. Shall we burn or boil our FB combs, frames and hives. New Zealand Beekeepers' Journal 28:486-488.

⁽c) BROOD DISEASES

- HORNITZKY, M. 1983. Break-through in control of American fouldbrood. Apiarist 31:1.
- MATHESON, A.G. 1984. Brood diseases in honey bees, significance and control. Wellington, Ministry of Agriculture and Fisheries, 4 pp (AgLink FPP 124, second revise). (Revised edition of Advisory Services Division, 1981).
- REID, G.M. 1984. Chalkbrood and half-moon in New Zealand. Australasian Beekeeper 85(12):232-234. 1322L/85
- ROBINSON, D.S.; NAIRN, R.G.; PALMER-JONES, T. 1951. New method of destroying bees in hives infected with American Foul Brood. New Zealand Journal of Agriculture 83(4):244-246.
- ROPE, C.G. 1966. Observations on American brood disease. New Zealand Beekeeper 28(4):29-30.
- ROPE, C.G. 1985. American foul brood (Bacillus larvae). New Zealand Beekeeper 185:23-26.
- SEAL, D.W.A. 1957. Chalk brood disease of bees. New Zealand Journal of Agriculture 95(6):562.
- VAN EATON, C.N. 1984. Chalkbrood : questions and answers. New Zealand Beekeeper 181:13-14.
- VAN EATON, C. 1986. Chalkbrood: what we don't know, what we do. New Zealand Beekeeper 190:8-10.
- VARLEY, J.H. 1973. Eradicating American Foul Brood. New Zealand Beekeeper 35(3):76-77.
- WALTON, T. 1979. Australian disease not wanted. New Zealand Beekeeper 40(3):21-23.
- WESTBROOKE, G.V.; JACOBSEN, F.A.; EARP, E.A. 1913. Foul-brood in bees, and its treatment. Wellington, New Zealand Department of Agriculture Bulletin No 1 (new series), 7 pp.
- WINTER, T.S. 1950. American foul brood disease and its control. New Zealand Beekeeper 12(4):21-22.
- YEOMAN, R. 1986. Aspects of <u>Ascosphaera</u> species associated with New Zealand hives. Unpubl. B.Sc (Hons.) project, Victoria University of New Zealand, 80 pp.

11. HONEY BEE POISONING

(a) PESTICIDES : GENERAL

- BERRY, I. 1983. New law for agricultural chemicals. New Zealand Beekeeper 177:5.
- BRISCOE, D.A. 1981. Regional co-operation beats spray damage. New Zealand Beekeeper 42(3):5-6.
- CLINCH, P.G. 1965. Laboratory tests help prevent bee losses through pesticides. New Zealand Beekeeper 27(3):32-33.
- CLINCH, P.G. 1967. The residual contact toxicity to honey bees of insecticides sprayed on to white clover (<u>Trifolium repens</u> L.) in the laboratory. New Zealand Journal of Agricultural Research 10(2):289-300. 175/70
- CLINCH, P.G. 1969. Laboratory determination of the residual fumigant toxicity to honey bees of insecticide sprays on white clover (Trifolium repens L.). New Zealand Journal of Agricultural Research 12(1):162-170.
- CLINCH, P.G. 1969. Pesticide toxicity and honey bees. New Zealand Journal of Agriculture 119(6):90-91. 466L/72
- CLINCH, P.G. 1981. Rapid methods for orally dosing adult honey bees, individually or in groups, without anaesthetic. New Zealand Journal of Experimental Agriculture 9:27-30. 112/82
- CLINCH, P.G. 1981. Laboratory and cage tests as alternatives to field trials for assessing toxicity to honey bees of pesticides applied to flowering white clover. Proceedings of the XXVIIIth International Congress of Apiculture, Acapulco, Mexico, pp 312-317. 634/84
- CLINCH, P.G. 1982. Replacement for Cyanogas. New Zealand Beekeeper 43(3):17. 594L/83
- CLINCH, P.G. 1986. Glue in plywood toxic to bees. New Zealand Beekeeper 190:7.

- CLINCH, P.G.; ROSS, J.G.M. 1970. Laboratory assessment of the speed of action on honey bees of orally dosed insecticides. New Zealand Journal of Agricultural Research 13(3):717-725. 782/72
- COOK, V.A. 1969. Honey bees must be protected when spraying clover crops. New Zealand Journal of Agriculture 119(6):93.
- COOK, V.A. 1971. Protecting bees from insecticides. New Zealand Journal of Agriculture 123(1):61-62. 674L/73
- COOK, V.A. 1971. Problems associated with protecting honey bees from pesticides applied to brassicas and white clover. New Zealand Beekeeper 33(2):21-24.
- COOK, V.A. 1977. Protecting honey bees by controlling pesticide applications to cruciferous and leguminous seed crops in New Zealand. Proceedings of the XXVI th International Apicultural Congress, Adelaide, pp 448-451. 695L/79
- DINGWALL, A.R. 1966. Spraying of brassica seed crops. New Zealand Journal of Agriculture 113(1):75.
- FORSTER, I.W. 1958. Agricultural chemicals and honey bees. New Zealand Beekeeper 20(3):31-34.
- LOWE, A.D. 1956. Insecticides applied to crops in flower can poison bees. New Zealand Journal of Agriculture 93(3):229-230.
- NEW ZEALAND AGRICULTURAL CHEMICALS BOARD TECHNICAL COMMITTEE. 1961. Effect of hormone weedkillers on bees. New Zealand Beekeeper 23(2):32.

692/62

- PALMER-JONES, T. 1950. Chemical weedkillers and the beekeeping industry. New Zealand Journal of Agriculture 80(2):129-132. 121/50
- PALMER-JONES, T. 1955. Dust gun for insecticides operated by carbon dioxide. New Zealand Journal of Agriculture 91(1):79-80.

- PALMER-JONES, T. 1958. Agricultural chemicals and the beekeeping industry. New Zealand Journal of Agriculture 97(4):298-304.
- PALMER-JONES, T. 1958. Laboratory methods for measuring the toxicity of pesticides to honey bees. New Zealand Journal of Agricultural Research 1(3):290-300. 169/59
- PALMER-JONES, T. 1960. Effect on honey bees of some chemical weedkillers. New Zealand Journal of Agricultural Research 3(3):485-490. 460/61
- PALMER-JONES, T. 1965. Toxicity of pesticides to honey bees. Proceedings of the New Zealand Weed and Pest Control Conference 18:203-207. 563/67
- PALMER-JONES, T. 1967. Pesticides and New Zealand beekeeping. New Zealand Science Review 25(3):23-26. (reprinted in New Zealand Beekeeper 30(1):2-8, 1968). 209L/68
- PALMER-JONES, T.; FORSTER, I.W. 1958. Agricultural chemicals and the beekeeping industry. New Zealand Journal of Agriculture 97(4):298-304. 381/59
- PALMER-JONES, T.; FORSTER, I.W. 1958. Effect on honey bees of some defoliants. New Zealand Journal of Agricultural Research 1(5): 620-626. 499/62
- PATERSON, C.R. 1956. Effects of chemical weed control on beekeeping. New Zealand Journal of Agriculture 92(6): 530-532. 278/59
- PEARSON, T. 1972. Work of the Agricultural Chemicals Board. New Zealand Beekeeper 34(4):42-44.
- SLADE, D.A. 1965. Pesticides and honey bees summary. Proceedings of the New Zealand Weed and Pest Control Conference 18:248.

11. HONEYBEE POISONING (Continued)

(b) SPECIFIC PESTICIDES

CLINCH, P.G. 1970. Effect on honey bees of combs exposed to vapour from dichlorvos slowrelease strips. New Zealand Journal of Agricultural Research 13(2):448-452. 993/71

CLINCH, P.G.; PALMER-JONES, T. 1971. Effect on honey bees of dicrotophos applied as a preblossom spray to raspberries (<u>Rubus idaeus</u> L.). New Zealand Journal of Agricultural Research 14(4):927-930.

180/73

- CLINCH, P.G.; PALMER-JONES, T. 1974. Effect on honey bees of pirimicarb applied as a spray to chou moellier. New Zealand Journal of Experimental Agriculture 2(2):209-211. 830/75
- CLINCH, P.G.; PALMER-JONES, T. 1974. Effect on honey bees of azinphos-methyl applied as a preblossom spray to chinese gooseberries. New Zealand Journal of Experimental Agriculture 2(3):205-207. 248/76
- CLINCH, P.G.; PALMER-JONES, T.; FORSTER, I.W. 1966. Effect on honey bees of diazinon and phenthoate applied as sprays to white clover (Trifolium repens L.). New Zealand Journal of Agricultural Research 9(4):980-984. 564/67
- CLINCH, P.G.; PALMER-JONES, T.; FORSTER, I.W. 1973. Effect on honey bees of dicrotophos and methomyl applied as sprays to white clover. New Zealand Journal of Experimental Agriculture 1(1):97-99. 211/74
- COTTIER, W. 1946. DDT and honeybees. New Zealand Beekeeper 8(3): 21-23.
- McINTOSH, I.G.; PALMER-JONES, T.; STAPLES, E.L.J. 1964. 1080 poison baits for animal pests. New Zealand Journal of Agriculture 108(2):141-143. 640/64

- PALMER-JONES, T. 1959. Effect on honey bees of thiodan applied to broad beans in a cage. New Zealand Journal of Agricultural Research 2(2): 229-233. 128/60
- PALMER-JONES, T. 1964. Effect on honey bees of 2,4-D. New Zealand Journal of Agricultural Research 7(3):339-342. 618/65
- PALMER-JONES, T.; BARTRUM, F.A.; FORSTER, I.W.; HARRISON, D.L. 1954. Effect on honey bees of DDT plus superphosphate applied as a dust to white clover pasture. New Zealand Journal of Science and Technology (A) 36(2):177-192. 216/55
- PALMER-JONES, T.; CLINCH, P.G. 1968. Effect on honey bees of dichlorvos and bromophos applied as sprays to white clover (<u>Trifolium</u> <u>repens</u> L.). New Zealand Journal of Agricultural Research 11(1):138-141. 995/70
- PALMER-JONES, T.; CLINCH, P.G. 1973. Effect on honey bees of BTS 27419 applied as a spray to apple trees. New Zealand Journal of Experimental Agriculture 1(2):195-196. 465/74
- PALMER-JONES, T.; FORSTER, I.W. 1958. Effect on honey bees of DDT applied from the air as a spray to lucerne; notes on lucerne pollination. New Zealand Journal of Agricultural Research 1(5):627-632. 500/62
- PALMER-JONES, T.; FORSTER, I.W. 1963. Effect on honey bees of dipterex, thiodan and phosdrin applied as sprays to white clover (<u>Trifolium repens</u> L.). New Zealand Journal of Agricultural Research 6(3):303-306. 642/64
- PALMER-JONES, T.; FORSTER, I.W. 1964. Effect on honey bees of phosphamidon applied as a spray to white clover (<u>Trifolium repens</u> L.). New Zealand Journal of Agricultural Research 7(4):644-646. 617/65

- PALMER-JONES, T.; FORSTER, I.W.; GRIFFIN, L.A.M. 1957. Effect on honey bees of metasystox applied from the air as a spray to chou moellier. New Zealand Journal of Science and Technology (A) 38(7):752-769. 270/58
- PALMER-JONES, T.; FORSTER, I.W.; JEFFERY, G.L. 1959. Effect on honey bees of Rogor and Endothion applied from the air as sprays to brassicas; trial of M.G.K. repellent 874. New Zealand Journal of Agricultural Research 2(3):475-480. 23/61
- PALMER-JONES, T.; FORSTER, I.W.; JEFFERY, G.L. 1959. Effect on honey bees of DDT and thiodan applied from the air as sprays to chou moellier. New Zealand Journal of Agricultural Research 2(3):481-487. 279/60
- PALMER-JONES, T; FORSTER, I.W.; LINE, L.J.S. 1958. Effect on honey bees of toxaphene and strobane applied to white clover pasture. New Zealand Journal of Agricultural Research 1(5):694-706. 501/62
- REID, G.M. 1977. Phosphorus baits not harmful to honey bees. New Zealand Journal of Agriculture 134(4):26-27. 1423/79

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11. HONEY BEE POISONING (Continued)

(c) BEE POISONING OTHER THAN PESTICIDES

- CARMAN, K.R. 1985. Rhododendrons: a timely warning. Apiarist 45:4.
- CLINCH, P.G.; PALMER-JONES, T.; FORSTER, I.W. 1972. Effect on honey bees of nectar from the yellow kowhai (<u>Sophora microphylla</u> Ait.). New Zealand Journal of Agricultural Research 15(1): 194-201. 171/7
- HARRISON, D.L.; PALMER-JONES, T.; NAIRN, R.G. 1959. Danger of using arsenic-treated timber for beehives. New Zealand Journal of Agriculture 98(4):338-339. 206/60
- MATHESON, A.G.; SMITH, J. 1979. A day in the life of a guinea pig, or how Customwood killed my bees. New Zealand Beekeeper 40(2):14.
- PALMER-JONES, T. 1968. Nectar from karaka trees poisonous to honey bees. New Zealand Journal of Agriculture 117(2):77. 729/70
- PALMER-JONES, T.; LINE, L.J.S. 1962. Poisoning of honey bees by nectar from the karaka tree. New Zealand Journal of Agricultural Science 5(5,6): 433-436. (reprinted in New Zealand Beekeeper 30(1):8-10, 1969). 865/63
- PALMER-JONES, T.; LINE, L.J.S. 1969. Poisoning of bees from karaka trees. New Zealand Beekeeper 30(1):8-10. 730/70
- REID, G.M. 1973. Our not so innocent national flower. New Zealand Beekeeper 35(3):61.

12. HONEY

(a) GENERAL: PRODUCTION, MARKETING, MARKETING ORGANIZATIONS

- BALE, M.D. 1967. A study of the marketing of New Zealand honey. Massey University, Department of Agricultural Economics and Farm Management. Discussion Paper No.48, 80pp.
- BERRY, I. 1979. Selling your honey crop. New Zealand Journal of Agriculture 138 (4):42,44.
- BERRY, I. 1980. Where the bee sucks: some inside information on honey. New Zealand Journal of Agriculture 140 (5):81,83.
- BERRY, P. 1974. Marketing honey overseas; Part 2: export of comb honey. New Zealand Beekeeper 36(4):34-36. 1152L/76
- BYRD, R.E. 1929. Honey for Antarctic. New Zealand Smallholder 11(4): 225.
- CAWTHRON INSTITUTE. 1938. Honey research at Cawthron Institute, 1937-1938. New Zealand Honeybee 1(11):87.
- COOK, V.A. 1973. South Island potential for honey production. New Zealand Journal of Agriculture 126(5):53-54. 254/76
- DICKINSON, I.J. 1976. Why I supply the H.M.A. New Zealand Beekeeper 38(4):29-31.
- DICKSON, P. 1974. The housewife's action and reaction to the honey pack. New Zealand Beekeeper 36(4):38-43.
- FRASER, J.W. 1967. Natural and man-made factors limit output of NZ honey. New Zealand Journal of Agriculture 115(3):57, 59, 61, 63.
- HARKER, L.S. 1927. New Zealand "Imperial Bee" honey. Bee World 8(11):172-173.
- HILLARY, P.A. 1933. The honey industry : costs of production; selling value of honey. New Zealand Smallholder 15(7):350-353.

- HONEY EXPORT BOARD. 1929. New Zealand honey export control; how it operates. New Zealand Economic Pamphlets 1(16).
- HONEY MARKETING AUTHORITY. 1958. New Auckland premises for the Honey Marketing Authority. New Zealand Beekeeper 20(2): 23-26.
- HONEY MARKETING AUTHORITY. 1967. Overseas marketing. Does our future lie in retail packs or bulk selling? New Zealand Beekeeper 29(2):14-19.
- HOPKINS, I. 1885. Honey market. New Zealand and Australian Bee Journal 2(19):80 (describes steps taken to establish a honey depot and fixing uniform selling prices for honey).
- HOPKINS, I. 1922. New Zealand honey. Bee World 4(2):44-46.
- KIRK, T.W. 1901. Export of honey and beeswax. New Zealand Department of Agriculture, Wellington, Annual Report, pp339-345.
- MORRISON, A.E. 1938. Honey Marketing Regulations. New Zealand Journal of Agriculture 57(6): 546-547.
- NATIONAL BEEKEEPERS' ASSOCIATION. 1953. Case for a subsidy on honey. New Zealand Beekeeper 15(3):33-39.
- PICOT, F.R. 1938. Marketing of honey: packing, branding, and consigning honey. New Zealand Journal of Agriculture 56(4):285.
- POOLE. R.F. 1974. Marketing honey overseas; Part 1: the export of bulk honey. New Zealand Beekeeper 36(4):31-34. 1152L/76
- RENTOUL, J. 1928. Our honey markets. New Zealand Smallholder 19(4):229-232, 240-241.
- RENTOUL, J. 1944. The war-created demand for honey. New Zealand Beekeeper 6(3):5-6.
- ROBERTS, E. 1975. Honey through the ages. New Zealand Beekeeper 37(1):9-15.
- SPINLEY, R.S. 1922. New Zealand honey. Bee World 4(2):51.

STUCKEY, M. 1974. Marketing of honey within New Zealand; Part 3: the viewpoint of a packer of speciality lines. New Zealand Beekeeper 36(4):29-31. 1152L/76

WALTON, G.M. (ed.). 1974. Honey: its production, processing, packaging and promotion (Proceedings of a beekeeping seminar held at Taupo. 1974). Palmerston North, Ministry of Agriculture and Fisheries, 137pp. 648/77

- 85 -

(b) COMPOSITION AND PROPERTIES

BARKER, W.E. 1917. Crystallisation from a geologic point of view. New Zealand Beekeepers' Journal 37:625-628.

- HOPKINS, I. YEAR? The growth in honey. New Zealand Beekeepers' Journal 23: 380.
- JACOBSEN, F.A. 1915. Analysis of honey-scum. New Zealand Journal of Agriculture 10(6):569.

MOAR, N.T. 1985. Pollen analysis of New Zealand honey. New Zealand Journal of Agricultural Research 28:39-70. 1351/86

- MOAR, N.T. 1985. Pollen analysis of honey. New Zealand Beekeeper 187:27-29. 663L/86
- PAWAN, G.L.S. 1985. Honey. New Zealand Beekeeper 191:34-35.
- REID, W.D.; ROBINSON, D.S. 1934. Grading "grain" in honey. New Zealand Journal of Agriculture 48(4):226-229.
- RIGG, T. 1936. Honey research and Cawthron Institute. New Zealand Smallholder 18(10): 466-467.
- ROPE, C.G. 1965. The nature of honey. New Zealand Beekeeper 27(4):8-9.
- ROPE, C.G. 1969. Honey is hygroscopic. New Zealand Beekeeper 31(2):42.
- ROPE, C.G. 1970. Effect of heat on honey. New Zealand Beekeeper 32(3):46.
- RUSSELL, K.M. 1986. The antibacterial properties of honey. M.Sc. thesis, University of Waikato, Hamilton.
- TAN, S.T.; WILKINS, A.L.; REID, G.M. 1986. Floral source identification: a chemical approach. New Zealand Beekeeper 190:21-23.
- THAWLFY, A.R. 1966. Honey: chemical composition in review. Cawthron Institute Triennial Report 1963-1966: pp 41-47.
- THAWLEY, A.R. 1969. The components of honey and their effects on its properties: a review. Bee World 50(2):51-60. 181/70

THOMSON, R.H.K. 1936. The chemical composition of New Zealand honey. New Zealand Journal of Science and Technology (A) 18(1): 124-130.
THOMSON, R.H.K. 1936. The chemistry of honey. New Zealand Smallholder 19(2):84-85.
THOMSON, R.H.K. 1938. Granulation problems in New Zealand honey. New Zealand Journal of Science and Technology 19(11):714-719.
WATERS, R. 1915. Pollen grains as source-indicators of honey. New Zealand Journal of Agriculture

11(3):213-215.

- 87 -

- 12. HONEY (Continued)
 - (c) GRADING, QUALITY, JUDGING, FLAVOUR AND AROMA
 - COOK, V.A. 1974. Honey grading at Pleasant Point. New Zealand Journal of Agriculture 129(4):61-62.
 - FIX, W.J. 1948. The grading of New Zealand honey. New Zealand Journal of Agriculture 76(3):249-250.
 - HILLARY, P.A. 1933. Honey grading : how to obtain high points. New Zealand Smallholder 16(2): 76-78; 16(3):130-132.
 - REID, W.D.; ROBINSON, D.S. 1934. Grading "grain" in honey. New Zealand Journal of Agriculture 48(4):226-229.
 - ROPE, C.G. 1966. Their taste is your livelihood. New Zealand Beekeeper 28(2):14-16. 171L/67
 - ROPE, C.G. 1968. What is meant by specific gravity. New Zealand Beekeeper 30(4):38-39.
 - ROPE, C.G. 1969. Fermentation in honey. New Zealand Beekeeper 31(1):10-12. 765L/70
 - ROPE, C.G. 1970. Effect of heat on honey. New Zealand Beekeeper 32(3):46.
 - ROPE, C.G. 1978. New Zealand honey quality standards. New Zealand Beekeeper 39(4):25-27.
 - SMAELLIE, E. 1946. Importance of flavour in honey. New Zealand Journal of Agriculture 72(3):305-306.
 - THAWLEY, A.R. 1967. New research on honey flavour. New Zealand Beekeeper 29(1):19.
 - THOMSON, R.H.K. 1936. The Fiehe test for adulteration of honey. New Zealand Journal of Science and Technology (A) 18(1):67-70.
 - THOMSON, R.H.K. 1938. The colour of some typical New Zealand honeys. New Zealand Journal of Science and Technology (B) 20(3):133-138.

- THOMSON, R.H.K. 1939. The removal of undesirable vour and colour from New Zealand honey. New Zealand Journal of Science and
 - WALSH, R.S. 1960. Factors affecting honey quality. New Zealand Journal of Agriculture 100(3):291-293.
 - WALSH, R.S. 1972. What excessive humidity means to the beekeeping industry. New Zealand Beekeeper 34(4): 34-37. (adapted from New Zealand Journal of Agriculture 1955 91(1):39-41, 1955).
 - WALTON, G.M. 1979. Honey grading and certification changes on the way. New Zealand Beekeeper 40(2):9-10.
 - WALTON, G.M. 1981. New procedures for honey export certification New Zealand Beekeeper 42(1):708.
 - WATERS, R. 1920. Honey and atmospheric moisture. New Zealand Journal of Agriculture 26(2):105-107.
 - WESTBROOKE, G.V. 1916. Testing honey for ripeness. New Zealand Beekeepers' Journal 24:417-419.
 - WESTBROOKE, G.V. 1932. Honey grading : evolution of Dominion system. New Zealand Smallholder 14(10):577.
 - WINTER, T.S. 1939. Standardisation and grading of honey. New Zealand Beekeeper 1(4):5-7.

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Technology (B) 20(4):220-227.

- 12. HONEY (Continued)
 - (d) HONEY HOUSE; CONSTRUCTION, HOT AND COOL ROOMS
 - ANONYMOUS. 1980. Dehumidifiers. New Zealand Beekeeper 41(3):8-9.
 - BRYANT, T.G. 1979. Your honeyhouse and the food hygiene regulations. Apiarist 10:6.
 - GREIG, A.M.W. 1956. Honey houses : appointment of Apiary Instructors as inspectors under the Food and Drugs Act. New Zealand Beekeeper 18(2):17.
 - HOBBS, R.H. 1975. Honey-house flooring. New Zealand Beekeeper 37(1): 20-21.
 - JACOBSEN, F.A. 1914. Apiary buildings. New Zealand Journal of Agriculture 9(1):91-93.
 - JOHNSON, L.H. 1954, 1955. Honey house construction and layout of plant. New Zealand Journal of Agriculture 88(5): 486-488; 88(6): 534-536; 89(1): 56-64 (1954); 90(2): 126-128 (1955). 308/55, 200/59
 - JOHNSON, L.H. 1956. A cool room for honey. New Zealand Journal of Agriculture 93(2):151-156. 239/59
 - JOHNSON, L.H. 1960. Hot room for liquefying honey. New Zealand Journal of Agriculture 1.0(5):459-464. 26/61
 - LINE, L.J.S. 1955. Substitute for a beekeeper's hot room. New Zealand Journal of Agriculture 91(5):461-462. 128/59
 - MAINDONALD, P.J. 1969. Insulation, heating and refrigeration. New Zealand Beekeeper 31(1):15-16.
 - MARSHALL, P.W. 1969. Heating the warm room in the honey house. New Zealand Journal of Agriculture 118(2):57-59.

PATERSON, C.R. 1952. Honey house construction. New Zealand Journal of Agriculture 85(6):491-494. 273/54 PATERSON, C.R. 1955. Construction of a beekeeper's cool room. New Zealand Journal of Agriculture 90(4):355-360. 260/57 TRYTHALL, A.B. 1922. Model apiary building at Ruakura. New Zealand Journal of Agriculture 14(3): 168-169. WALTON, G.M. 1975. Honey house design. New Zealand Beekeeper 37(3): 59-60.

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(e) HONEY PROCESSING: GENERAL METHODS
AND SYSTEMS
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BRAY, P. 1986. Heating problems. New Zealand Beekeeper 192:19.

BRYANT, T.G. 1978. An automatic electric boiler unit. New Zealand Beekeeper 39(3):17.

- COOK, V.A. 1969. Modern honey processing. New Zealand Journal of Agriculture 118(2):51-55.
- JOHNSON, L.H. 1955. Honey-extracting room with high standards of efficiency and cleanliness. New Zealand Journal of Agriculture 91(5): 547-550. 204/59
- LINE, L.J.S. 1956. A small converted boiler for beekeeping work. New Zealand Journal of Agriculture 92(3):261-262. 240/59
- PATERSON, C.R. 1951. Honey house equipment. New Zealand Journal of Agriculture 83(3): 186-187. 220/52
- PATERSON, C.R. 1952. Honey house equipment. New Zealand Journal of Agriculture 84(2):90-91. 270/52
- REID, G.M. 1975. New ideas in honey processing. New Zealand Journal of Agriculture 130(4):30-32; New Zealand Beekeeper 37(3):66-69.
- REID, G.M. 1980. Bosca builds boiler for beekeepers. New Zealand Beekeeper 41(1):13-14.
- RENTOUL, J. 1922. Hygienic conditions in the extracting room. New Zealand Beekeepers' Journal 6(7):118-120.
- RENTOUL, J. 1938. Honey processing equipment. New Zealand Honeybee 1(9):70-71; 1(10):78-79.
- SMAELLIE, E. 1954. Hazards in beekeeping. New Zealand Journal of Agriculture 89(5):517-522.
- WALSH, R.S.; ROBERTS, D. 1951. Independent unit for warming, straining and drying honey. New Zealand Journal of Agriculture 82(3):227-228.

WALLINGFORD, N. 1980. Beekeepers make successful honey knife. New Zealand Beekeeper 41(4):24.
WINTER, T.S. 1936. An improved electric uncapping knife. New Zealand Smallholder 18(9):411-412.

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- (g) PROCESSING EQUIPMENT: CLARIFYING, SUMP TANK
- JACOBSEN, F.A. 1914. Eliminating scum and manipulating for smooth-grained article. New Zealand Journal of Agriculture 9(2):151-155.
- JACOBSEN, F.A. 1915. Analysis of honey-scum. New Zealand Journal of Agriculture 10(6):569.
- PATERSON, C.R. 1939. Efficient method of straining honey. New Zealand Journal of Agriculture 59(3):259-260.
- PATERSON, C.R. 1950. A compact honey heater and clarifier. New Zealand Journal of Agriculture 80(3):237-239.
- PATERSON, C.R. 1963. New-type strainer for warm honey. New Zealand Journal of Agriculture 107(6):509-511. 652/64
- ROBERTS, D. 1951. Self-clearing honey strainer. New Zealand Journal of Agriculture 82(4):335. 135/52
- ROBINSON, D.S. 1938. Efficient method of skimming honey. New Zealand Journal of Agriculture 57(5):453.
- ROPE, C.G. 1967. Straining honey. New Zealand Beekeeper 29(1):14-16.

773/68

WALSH, R.S.; ROBERTS, D. 1951. Independent unit for warming, straining and drying honey. New Zealand Journal of Agriculture 82(3):227-228.

- 12. HONEY (Continued)
 - (h) PROCESSING EQUIPMENT AND TECHNIQUES: LIQUEFYING, GRANULATING HONEY
 - EARP, E.A. 1916. Liquefying granulated honey. New Zealand Journal of Agriculture 12(6):480-481.
 - HILLARY, P.A. 1937. How to secure smooth grain. New Zealand Honeybee 1(2):9; 1(3):17; 1(4):25, 27; 1(6):41-42.
 - HORTICULTURE DIVISION. 1951. Methods to ensure smooth granulation of honey. New Zealand Journal of Agriculture 82(2):177.
 - JACOBSEN, F.A. 1915. How to improve the general quality of our produce. New Zealand Beekeepers' Journal 12:209-210.
 - JOHNSON, L.H. 1952. Design for simply made honey heater. New Zealand Journal of Agriculture 84(4):283-284. 168/54
 - JOHNSON, L.H. 1953. Liquifying granulated honey. New Zealand Journal of Agriculture 86(3):199-200.
 - JOHNSON, L.H. 1957. Processing honey to obtain soft, finely crystallised product. New Zealand Journal of Agriculture 95(5):491-495.
 - NEW ZEALAND SMALLHOLDER 1935. The Dyce Process: patents revoked. New Zealand Smallholder 18(1):32.
 - PATERSON, C.R. 1950. Use of stirrer ensures smooth grain in honey. New Zealand Journal of Agriculture 80(5):435-436.
 - PATERSON, C.R. 1953. Smooth granulation in honey. New Zealand Journal of Agriculture 86(2):116-118.
 - PATERSON, C.R. 1956. Melting honey by steam. New Zealand Journal of Agriculture 92(1):29,31. 242/59
 - PATERSON, C.R. 1956. Melting honey by electric, hot water method. New Zealand Journal of Agriculture 92(2):110. 309/59

PATERSON, C.R. 1958. Recent developments in processing honey for soft, smooth grain. New Zealand Journal of Agriculture 97(6):513-518. 348/59 ROPE, C.G. 1973. Starter need in bulk export honeys. New Zealand Beekeeper 35(1):24-26. THOMSON, R.H.K. 1938. Granulation problems of New Zealand honeys. New Zealand Honeybee 1(11):81-83.THOMSON, R.H.K. 1938. Granulation problems in New Zealand honey. New Zealand Journal of Science and Technology 19(11):714-719. WALSH, R.S. 1960. Anti-granulation method for honey packers. New Zealand Journal of Agriculture 101(3):229-231. WALSH, R.S. 1961. Preparing granulated honey for sale and export. New Zealand Journal of 705/62 Agriculture 102(2):151-153.

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- 12. HONEY (Continued)
 - (i) PROCESSING EQUIPMENT: TANKS, PUMPS, MOVING HONEY

BENNETT, A.W. 1959. Honey gate fitting for transfer of honey from one tank to another. New Zealand Journal of Agriculture 99(3):277. 216/60

- BRISCOE, D.A. 1952. Constructing a honey-house bogey. New Zealand Journal of Agriculture 85(1):61-62. 59/55
- BRISCOE, D.A. 1952. Improvement in design of honeyhouse bogey. New Zealand Journal of Agriculture 85(5):396.
- BRISCOE, D.A. 1974. Shifting in the honeyhouse. New Zealand Beekeeper 37(1):17-19.
- COOK, V.A. 1971. Tank to handle big honey crops. New Zealand Journal of Agriculture 122(2):79, 81. 260L/76
- COOK, V.A. 1971. Bulk honey barrow. New Zealand Journal of Agriculture 122(6):29. 263L/76
- JOHNSON, L.H. 1955. Honey house wagon. New Zealand Journal of Agriculture 91(4):385-386. 201/59
- MATHESON, A.G.; REID, G.M. 1978. Honey feels the pinch with new pump. New Zealand Beekeeper 39(2):5.
- PATERSON, C.R. 1950. Honey pump with automatic control. New Zealand Journal of Agriculture 80(4):341-342.
- PATERSON, C.R. 1961. Mechanical lift for supers during honey extraction. New Zealand Journal of Agriculture 103(4):387, 389, 391. 898/63
- POOLE, R. 1972. Mechanisation : why, when, what and how. New Zealand Beekeeper 34(4):21, 37.
- ROBERTS, D. 1957. Tilting stand for honey tank. New Zealand Journal of Agriculture 95(4):403-404.

202/59

ROPE, C.G. 1968. Pumping honey. New Zealand Beekeeper 30(2):20. 759L/70 12. HONEY (Continued) COMB HONEY: PRODUCTION, PROCESSING (j) AND MARKETING BARTRUM, F.A. 1953. Production of section honey. New Zealand Journal of Agriculture 87(6):539. 99/55 DODSON, H.F. 1937. Comb honey. Its production and marketing. New Zealand Journal of Agriculture 55(1):44-46. PATERSON, C.R. 1950. Warming-room unit for comb honey. New Zealand Journal of Agriculture 81(4):315-316. ROBERTS, D. 1958. Improved method of fitting wax foundation to sections in comb honey production. New Zealand Journal of Agriculture 96(6): 593-598. ROPE, C.G. 1962. Production of section comb honey. New Zealand Journal of Agriculture 105(4):363-365.379/63 ROPE, C.G. 1963. Cut-comb honey. New Zealand Journal of Agriculture 106(3):205-207. 199/64 SMAELLIE, E. 1957. Hive management for section comb production. New Zealand Journal of Agriculture 94(4):385-388. 367/59 SMAELLIE, E. 1957. Preparing section comb honey for market. New Zealand Journal of Agriculture 94(5):495-497. 367/59 SMAELLIE, E. 1957. Preparation of cut-comb honey for market. New Zealand Journal of Agriculture 94(6):602-604. WALSH, R.S. 1943. Producing honey in "cogs". New Zealand Journal of Agriculture 69(1):71-72. WALSH, R.S.; ROPE, C.G. 1971. Producing section honey for export. New Zealand Journal of Agriculture 122(2):83-87,89,91,93,95,97; New Zealand Beekeeper 34(1):9-14. 172L/74

(k) MOISTURE IN HONEY, SPECIFIC GRAVITY

DAVIDSON, R. 1953. Specific gravity: some observations on the "wet" honey position in the South Island. New Zealand Beekeeper 15(4):17-18.

- FIX, W.J.; PALMER-JONES, T. 1947. Control of fermentation in honey by indirect heating and drying. New Zealand Journal of Agriculture 74(6):611-616.
- FIX, W.J.; PALMER-JONES, T. 1949. Control of fermentation in honey by indirect heating and drying. New Zealand Journal of Science and Technology (A)31(1):21-31. 146/51
- PATERSON, C.R.; PALMER-JONES, T. 1955. A vacuum plant for removing excess water from honey. New Zealand Journal of Science and Technology (A) 36(4):386-400. 167/55
- PATERSON, C.R.; PALMER-JONES, T. 1955. Vacuum plant for removing excess water from honey. New Zealand Journal of Agriculture 90(6):571-578. 205/59
- ROBERTS, D. 1957. A plant for treating honey by the vacuum process. New Zealand Beekeeper 19(3):31-35.
- ROBERTS, D. 1964. Preventing absorption of excess moisture by honey. New Zealand Journal of Agriculture 108(2):161-164. 653L/64
- ROPE, C.G. 1968. What is meant by specific gravity. New Zealand Beekeeper 30(4):38-39.
- ROPE, C.G. 1969. Fermentation in honey. New Zealand Bcckeeper 31(1):10-12. 765L/70
- ROPE, C.G. 1969. Honey is hygroscopic. New Zealand Beekeeper 31(2):42.
- WALSH, R.S. 1955. Effects of excessive humidity on beekeeping. New Zealand Journal of Agriculture 91(1):39-41.
- WALSH, R.S. 1972. What excessive humidity means to the beekeeping industry. New Zealand Beekeeper 34(4):34-37.

WATERS, R. 1920. Honey and atmospheric moisture. New Zealand Journal of Agriculture 26(2):105-107.
WESTBROOKE, G.V. 1916. Testing honey for ripeness. New Zealand Beekeepers Journal 24:417-419.
WESTBROOKE, G.V. 1920. Treatment of unripe honey: successful experiments in vacuum boiling. New Zealand Beekeepers Journal 4(6): 104-105.

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12. HONEY (Continued)

(1) BLENDING, BOTTLING, PACKAGING AND LABELLING

BARBER, C.L. 1974. The packaging and labelling of honey. New Zealand Beekeeper 36(4):37.

PATERSON, C.R. 1954. Honey-filling machine. New Zealand Journal of Agriculture 88(4):355-357. 200/56

ROPE, C.G. 1968. It does not pay honey farmers to blend different classes of honey. New Zealand Beekeeper 30(1): 22-23.

WALSH, R.S. 1960. Anti-granulation method for honey packers. New Zealand Journal of Agriculture 101(3):229-231. 413/63

WALSH, R.S. 1961. Honey packing problems. New Zealand Beekeeper 23(4): 21-23. 412/63 - 103 -

12. HONEY (Continued)

(m) MANUKA HONEY AND ITS HANDLING

Manuka honey. New Zealand Beekeeper ANONYMOUS. 1951. 175/53 13(3):9,10,13,17,23,25,28. BENTON, H. 1918. Harvesting unextractable honey. New Zealand Beekeepers' Journal 2(8):116-117. FRANKE, D. 1922. Appliance for extracting thick honey. New Zealand Beekeepers' Journal 6(5):73. HAINES, M.D. 1975. Handling manuka honey. Part II. New Zealand Beekeeper 37(3):62-63. PATERSON, C.R.; ROBERTS, D. 1954. Honey house plant for handling manuka honey. New Zealand Journal of Agriculture 89(2):129-135. 106/55 PEGRAM, P. 1975. Handling manuka honey. Part I. New Zealand Beekeeper 37(3):61-62. ROBERTS, D. 1950. Improved pricker pad. New Zealand Journal of Agriculture 81(5):421-422. Mechanical pricker for extracting ROBERTS, D. 1959. heavy-bodied honey. New Zealand Journal of Agriculture 99(4):328-331. 173/60 ROPE, C.G. 1959. Cappings press for heavy-bodied honeys. New Zealand Journal of Agriculture 99(5):465-467. WALTON,G.M. 1975. Handling thixotropic honey. Part III New Zealand Beekeeper 37(3):63-65.

(n) DEFECTS IN HONEY, TOXIC HONEY

ANONYMOUS. 1949. Honey poisoning in New Zealand. Science Progress 49: 327-328.

BRISCOE, D.A. 1969. The "closed area" is now the restricted zone. New Zealand Beekeeper 31(2):24.

- BRISCOE, D.A. 1970. Restricted zone, Bay of Plenty. New Zealand Beekeeper 32(2):24.
- BRISCOE, D.A. 1979. Toxic honeydew of the North Island. Apiarist 7: 3-5. 1024L/80
- BRYANT, T.G.; MATHESON, A.G. 1984. Beekeeping, toxic honey, from tutu honey dew. Wellington, Ministry of Agriculture and Fisheries, 3 pp. (AgLink FPP827).
- CLINCH, P.G. 1966. An improved intracerebral injection method for detecting tutin and hyenanchin in toxic honey. New Zealand Journal of Science 9(2):433-439. 237/68
- CLINCH, P.G.; TURNER, J.C. 1968. Estimation of tutin and hyenachin in honey. Part 2. The toxicity of honey samples from test hives during the period 1962-67. New Zealand Journal of Science 11(2):346-351. 566/69
- CLINCH, P.G.; TURNER, J.C. 1975. Estimation of tutin and hyenachin in honey. Part 3. Toxicity of honey samples from test hives 1968-74. New Zealand Journal of Science 18:323-328. 1371/77
- CUMBER, R.A. 1966. Factors influencing population levels of <u>Scolypopa australis</u> (Hemiptera-Homoptera : Ricaniidae) in New Zealand. New Zealand Journal of Science 9(2):336-356.
- GREIG, A.W.M. 1969. The maintenance of high quality honey. New Zealand Beekeeper 31(1):22-25.
- HAMILTON SEMINAR. 1965. The tutu problem. New Zealand Beekeeper 27(4):18-19.
- HAMMOND, J. 1976. Honey poisoning. Journal of the New Zealand Dietetic Association 30(1):27-28. 730/79

- HARRIS, W.F.; FILMER, D.W. 1947. A recent outbreak of honey poisoning. Part VI. Botanical investigations of pollen and nectar flora. New Zealand Journal of Science and Technology (A) 29(3):134-143. 147/51
- HODGES, R.; WHITE, E.P. 1966. Detection and isolation of tutin and hyenachin in toxic honey. New Zealand Journal of Science 9(1):233-235. 236/68
- HOPKINS, I. 1889,1890. Supposed case of honey poisoning at Matata. Australasian Bee Journal 2(12):181,186; 3(1):5; 3(3):36; 3(6):84-86; 3(7):101.
- HOPKINS, I. 1890. Another alleged honey poisoning case. Australasian Bee Journal 3(7): 101-103; 3(8):117-118, 125-126; 3(9):132.
- HOPKINS, I. 1919. Deleterious honey. New Zealand Fruitgrower 1(9):443-445; 2(8):1011.
- KIRK, T.W. 1906. Poisonous honey. Animal Report of the Department of Agriculture, Wellington pp 427-429.
- MELVILLE, A.; FASTIER, F.N. 1964. Detection of certain honey poisons. Proceedings of the University of Otago Medical School 42:3-4. 235/68
- MULVANY, T.J. 1884. The wharangi shrub. New Zealand and Australian Bee Journal 2(18):77. (suspected as cause of poisonous honey).
- PALMER-JONES, T. 1947. A recent outbreak of honey poisoning. Part I. Historical and descriptive. Part III. The toxicology of the poisonous honey and the antagonism of tutin, mellitoxin and picrotoxin by barbiturates. New Zealand Journal of Science and Technology (A) 29(3):107-114, 121-125. 147/51
- PALMER-JONES, T. 1965. Poisonous honey overseas and in New Zealand. New Zealand Medical Journal 64(399): 631-637. 581/67
- PALMER-JONES, T.; WHITE, E.P. 1949. A recent outbreak of honey poisoning. Part VII. Observations on the toxicity and toxin of the tutu (<u>Coriara arborea</u> Lindsay). New Zealand Journal of Science and Technology (A) 31(2):46-56.

- PATERSON, C.R. 1947. A recent outbreak of honey poisoning. Part IV. The source of the toxic honey - field observations. New Zealand Journal of Science and Technology (A) 29(3): 125-129. 147/51
- SUTHERLAND, M.D.; PALMER-JONES, T. 1947. A recent outbreak of honey poisoning. Part II. The toxic substances of poisonous honey. Part V. The sources of the toxic honey -laboratory investigations. New Zealand Journal of Science and Technology (A) 29(3):114-120, 129-133. 147/51
- SWALLOW, W.H.; CURTIS, J.F.; CLINCH, P.G.; TURNER, J.C. 1980. Estimation of tutin and hyenachin in honey. 4. Comparison of a new gas chromatographic method with intra-cerebral injection of mice. New Zealand Journal of Science 23(4):365-369. 622/82
- THOMSON, R.H. 1936. The Fiehe test for adulteration of honey. New Zealand Journal of Science Technology (A) 18(1):67-70.
- TURNER, J.C.; CLINCH, P.G. 1968. Estimation of tutin and hyenachin in honey. Part 1. A comparison of the thin layer chromatography and intracerebral injection methods. New Zealand Journal of Science and Technology 11(2):342-345. 565/69
- WALSH, R.S. 1957. Phenol tainted honey. New Zealand Beekeeper 19(4):28.

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(o) OTHER USES AND PRODUCTS OF HONEY

ASTON, B.C. 1915. Honey as a food. New Zealand Journal of Agriculture 11(1): 48-52.

HOPKINS, I. 1911. By-products of an apiary : honeymead and honey-vinegar as made at the Government apiaries. New Zealand Journal of Agriculture 3(4):335-337.

- MILLER, C.C. 1912. Food value of honey: why it should be eaten, honey and cooking recipes. New Zealand Department of Agriculture, Commerce and Tourism, Wellington, Bulletin No. 19 (new series), 8pp.
- MOLAN, P.C. 1985. Selection of honey for medical use. New Zealand Beekeeper 188:29-30. 355L/87
- NEW ZEALAND "IMPERIAL BEE" HONEY. 1928. The food value of honey. New Zealand "Imperial Bee" honey. 31pp (a trade publication in English and German in parallel columns).
- PALMER-JONES, T. 1953. Production of honey mead from New Zealand honeys. New Zealand Journal of Science Technology (A) 35 (4):375-389. 168/55
- PREBBLE, P.E. 1975. Homage to honey. New Zealand Journal of Agriculture 130(6): 57-59.
- TOPPING, E. 1948. Honey for cooking. New Zealand Journal of Agriculture 77(1):91-95.
- YOUNG, A.P. 1921. The food value of honey. New Zealand Beekeepers' Journal 5(5):92-94.

13. BEESWAX

(a) HANDLING OF CAPPINGS WAX

- BATES, K.N.; MUIR, P, 1969. A simple method of drying cappings for smaller beekeepers. New Zealand Beekeeper 31(3):24-26. 722L/70
- BRAY, W.B. 1929. Electricity for melting cappings. New Zealand Honey Producer 1(1):10-11; 1(2):10-11.
- BRISCOE, D.A. 1959. Dealing with wax cappings and prevention of robbing. New Zealand Journal of Agriculture 98(1):15-16.
- GRIFFIN, L.A. 1956. Electric top-heat cappings melter. New Zealand Journal of Agriculture 93(6):542-544. 241/59
- HAGERTY. 1920. The Hagerty steam knife and cappings melter. New Zealand Beekeepers' Journal 4(3):46.
- JACOBSEN, F.A. 1912. Honey cappings-press. New Zealand Journal of Agriculture 4(4):279-282.
- JOHNSON, L.H. 1949. Recovery of honey and beeswax from cappings and combs. New Zealand Journal of Agriculture 78(5):522-524.
- JOHNSON, L.H. 1951. Electric top heat wax cappings melter. New Zealand Journal of Agriculture 83(6):449-450. 250/52
- MATHESON, A.G. 1981. How to handle cappings. New Zealand Beekeeper 42(3):16-17. 319L/87
- MATHESON, A.G. 1981. Do it yourself cappings spinners on the West Coast. New Zealand Beekeeper 42(3):16-17. 973L/82
- MATHESON, A.G. 1982. Beekeeping, beeswax, production and processing. Wellington, Ministry of Agriculture and Fisheries, 3pp. (AgLink FPP 534). 665L/83
- PATERSON, C.R. 1945. Capping reducers and wax presses. New Zealand Journal of Agriculture 70(6):646-648.
- REID, G.M. 1981. A Waikato spinner. New Zealand Beekeeper 42(3):17-18. 972L/82
- REID, G.M. 1982. Water-jacketed cappings reducer. New Zealand Beekeeper 43(4):27-28. 315L/84

- ROBERTS, D. 1951. Combined uncapping can and cappings press. New Zealand Journal of Agriculture 82(6):482.
 ROBERTS, D. 1959. Combined cappings, comb, and honey melter. New Zealand Journal of Agriculture 98(2): 187, 189, 190. 65/60
 ROPE, C.G. 1959. Cappings press for heavy-bodied honeys. New Zealand Journal of Agriculture 99(5):465-467.
 SIMPSON, K.W. 1979. Ray Robinson's robbing room reaps rewards. New Zealand Beekeeper 40(2):22.
 SMEDLEY, C. 1918. The Smedley capping melter. New Zealand Beekeepers' Journal 2(12): 185-186.
 WINSLADE, G.E. 1972. A new way to handle cappings. New Zealand Beekeeper 34(2):18.
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13. BEESWAX (Continued)

(b) PROPERTIES, SPECIFICATIONS, MELTING, RENDERING, SALVAGING

- BAINES, F.C. 1919. The solar wax extractor. New Zealand Beekeepers' Journal 3(10):157.
- BENNETT, A.W. 1957. Solar wax extractor for beeswax. New Zealand Journal of Agriculture 94(3):334.
- BRAY, W.B. 1910. Rendering beeswax. New Zealand Journal of Agriculture 1(17): 509-514.
- BRAY, W.B. 1920. Beeswax. Christchurch, Lyttleton Times Co., 12 pp.
- BRISCOE, D.A. 1969. Salvaging beeswax: from burr combs and scrapings. New Zealand Journal of Agriculture 119(5):97-99.
- BRISCOE, D.A. 1970. Putting old sol to work. New Zealand Journal of Agriculture 121(2):80-81 (reprinted as: Using the sun to melt wax. New Zealand Beekeeper 32(4):10-14, 1970).
- BRUNT, P.J. 1984. Hive products; beeswax. New Zealand Beekeeper 183:9-12; 184:10, 12.
- CLOAKE, H. 1982. No place for Heath Robinson wax recovery units. New Zealand Beekeeper 43(2):25.
- COOK, V.A. 1969. Salvaging beeswax: the pneumatic press. New Zealand Journal of Agriculture 119(5):94-95.
- ECROYD, A.K. 1970. Beeswax: efficient salvaging and handling. New Zealand Beekeeper 32(4): 42-46.
- FORSTER, I.W. 1955. Steam press for salvaging beeswax. New Zealand Journal of Agriculture 90(1):82-83. 129/59
- GRIFFIN, L.A.M. 1955. A simple and easily constructed wax mould. New Zealand Journal of Agriculture 90(5):505. 34/57
- HANSEN, L. 1978. New wax press on the market New Zealand Beekeeper 39(1):8.

1095L/79

- HOPKINS, I. 1911. Testing suspected beeswax. New Zealand Journal of Agriculture 2(6):382.
- JACOBSEN, F.A. 1914. The apiary: clarifying wax and testing for impurities. New Zealand Journal of Agriculture 8(4):426.
- MATHESON, A.G. 1982. Simple wax rendering without boiler or press. New Zealand Beekeeper 43(1):15-16. 666L/83
- MATHESON, A.G. 1982. Beekeeping, beeswax, production and processing. Wellington, Ministry of Agriculture and Fisheries, 3 pp (AgLink FPP 534). 665L/83
- MATHESON, A.G. 1984. Rendering unit for spun cappings. New Zealand Beekeeper 182:16.
- NATIONAL BEEKEEPERS ASSOCIATION. 1967. Selling your beeswax. New Zealand Beekeeper 29(2):12.
- NEW ZEALAND STANDARDS INSTITUTE. 1950. New Zealand standard specification for beeswax: NZSS 743. 279/53
- PATERSON, C.R. 1962. Melting old or damaged combs by steam. New Zealand Journal of Agriculture 104(5):435-439. 417/63
- REID, G.M. 1980. Push-through hot water bath for cleaning bee frames. New Zealand Beekeeper 41(2):19-20. 597/81
- ROPE, C.G. 1959. Steam plant for rendering old bee combs. New Zealand Journal of Agriculture 99(1):43-46. 175/60
- SIMPSON, K.W. 1982. One stage wax processing. New Zealand Beekeeper 43(1):17-18. 667L/83
- SIMPSON, K.W. 1982. The Robins wax processing system. New Zealand Beekeeper 43(3):29-30. 668L/83
- SIMPSON, K.W.; MATHESON, A.G. 1982. Steam rendering of wax - some actual figures. New Zealand Beekeeper 43(3):31. 669L/83
- SMAELLIE, E. 1949. Beeswax salvaged with a hydraulic press. New Zealand Journal of Agriculture 79(2):162-164.
- WILLIAMS, T.P.J. 1954. Making a solar wax extractor. New Zealand Journal of Agriculture 88(3):204.

- 13. BEESWAX (Continued)
 - (c) COMB FOUNDATION
 - BAINES, F.C. 1918. Comb foundation making. New Zealand Beekeepers' Journal 2(2):25-27.
 - BRYANS, H. 1919. Comb foundations making. New Zealand Beekeepers' Journal 3(1)):160-161.
 - GALEA, F.A. 1981. Supering with drone foundation. New Zealand Beekeeper 42(2):30.
 - JACOBSEN, F.A. 1916. Wax-foundation making for the apiary. New Zealand Journal of Agriculture 13(2):114-120.
 - ROBERTS, D. 1958. Improved method of fitting wax foundation to sections in comb honey production. New Zealand Journal of Agriculture 96(6):593-598. 299/59
 - ROBERTS, D. 1960. Processed bee comb foundation. New Zealand Journal of Agriculture 101(2):193-196.
 - WALSH, R.S. 1971. Preparation of beeswax for comb foundation. New Zealand Beekeeper 33(4):41-43.

14. OTHER HIVE PRODUCTS

(a) POLLEN COLLECTION AND PROCESSING

ALLEN, L. 1979. In praise of pollen. New Zealand Journal of Agriculture 139(6):47, 49.

MUIR, P.; BATES, K.M. 1970. A simplified pollen trap. New Zealand Beekeeper 32(4):27. 542L/72

REID, G.M.; SIMPSON, K.W. 1982. Beekeeping, pollen production, collection and processing. Wellington, Ministry of Agriculture and Fisheries, 3 pp. (AgLink FPP 532).

REID, G.M.; SIMPSON, K.W. 1982. Beekeeping, pollen production, pollen trap design. Wellington, Ministry of Agriculture and Fisheries, 4 pp. (AgLink FPP 533).

15. POLLINATION

- (a) POLLINATION BY BEES: GENERAL, AND METHODOLOGY
- BERRY, I. 1982. Palletised hives for orchard pollination. New Zealand Beekeeper 43(4):14-15. 245L/84
- CLINCH, P.G. 1981. Emergency grids for traps assist pollination research. New Zealand Beekeeper 42(3):11. 999L/82
- COOK, V.A. 1974. Pollination in North Otago. New Zealand Journal of Agriculture 128(1):32-33.
- DONOVAN, B.J.; MACFARLANE, R.P. 1984. Bees and pollination. In Scott, R.R. (ed) New Zealand pest and beneficial insects. Lincoln University College of Agriculture, pp 247-270. 321L/85
- FORSTER, I.W. 1950. Pollination : the importance of honey bees. New Zealand Journal of Agriculture 81(6):539-544.
- HEINE, E.M. 1937. Observations on the pollination of New Zealand flowering plants. Transactions and Proceedings of the Royal Society of New Zealand 67:133-148.
- MACFARLANE, R.P.; DONOVAN, B.J. 1976. Bees and pollination. <u>In Ferro</u>, D.N. (ed.). New Zealand insect pests. Lincoln University College of Agriculture, pp 221-240. 380/78
- NEW ZEALAND JOURNAL OF AGRICULTURE. 1962. Bumble bees as pollinators. New Zealand Journal of Agriculture 105(3):261.
- NEW ZEALAND JOURNAL OF AGRICULTURE. 1966. South Island bumble bees welcome visitors to the North Island. New Zealand Journal of Agriculture 112(6):55.
- PALMER-JONES, T. 1959. Organisation of pollination service for farm seed industry. New Zealand Journal of Agriculture 98(1):17-23. 391/59
- PALMER-JONES, T. 1959. Construction and use of cages in beekeeping research. New Zealand Journal of Agricultural Research 2(2):242-248.

- PALMER-JONES, T.; SMAELLIE, E. 1950. Conditioning of bees to control pollination. New Zealand Journal of Agriculture 80(1):49-52.
- PRIESTLY, G. 1954. Use of honey bees as pollinators in unheated glasshouses. New Zealand Journal of Science and Technology (A) 36(3):232-236.
- PRIMACK, R.B. 1978. Variability in New Zealand montane and alphine pollinator assemblages. New Zealand Journal of Ecology 1:66-73. 33/81
- ROPE, C.G. 1984. Getting the most from the workers. New Zealand Fruit & Produce, November/ December 1984:40-41.
- SIMPSON, K.W. (ed.) 1982. Developed hill and high country legume and pollination workshop, Alexandra 6-7 July 1982. Oamaru, Ministry of Agriculture and Fisheries, 39 pp.
- SMAELLIE, E. 1943. Bees in relation to agriculture. New Zealand Journal of Agriculture 67(2):73-74.
- SMITH, J. 1979. The value of honey bees. Proceedings of the conference on alternative land uses in New Zealand, with emphasis on tree crops. 1017L/82
- THOMSON, G.M. 1891. Fertilisation of native flowers by honeybees. New Zealand Journal of Science (new issue) 1:71.
- THOMSON, G.M. 1927. The pollination of New Zealand flowers by birds and insects. Transactions of the Royal Society of New Zealand 57:106-126.
- TILLYARD, R.J. 1923. History of the introduction of beneficial insects into New Zealand. Proceedings of the Pan-Pacific Science Congress 2 383-390.
- WRATT, E.C. 1968. The pollinating activities of bumble bees and honey bees in relation to temperature, competing forage plants and competition from other foragers. Journal of Apicultural Research 7(2):61-66. 912/70

15. POLLINATION (Continued)

(b) POLLINATION OF RED CLOVER

- ANONYMOUS. 1881. A popular error: Italian bees can fertilise red clover. New Zealand Country Journal 5(2):120; 5(5):357.
- ARMSTRONG, J.B. 1883. Notes on the fertilisation of red-clover in New Zealand. New Zealand Journal of Science 1:474-475.
- ARMSTRONG, J.B. 1883. Fertilisation of red-clover in New Zealand. New Zealand Journal of Science 1:500-504.
- ARRETZ, P.V.; MACFARLANE, R.P. 1986. <u>Bombus ruderatus</u> introduced to Chile for red clover pollination. Bee World 67(1):15-22.
- CANTERBURY AGRICULTURAL COLLEGE. 1945. Red clover and bumble bees. Agricultural Bulletin. Canterbury Chamber of Commerce No.190.
- CLIFFORD, P.T.P. 1973. Increasing bumble bee densities in red clover seed production areas. New Zealand Journal of Experimental Agriculture 1(4):377-379. 615/76
- CUMBER, R.A. 1953. Some aspects of the biology and ecology of humble bees bearing upon the yields of red clover seed in New Zealand. New Zealand Journal of Science and Technology (B) 34: 227-240. 27/56
- FARR, S.C. 1895. Fertilisation of red clover. New Zealand Country Journal 19:299.
- FORSTER, I.W.; HADFIELD, W.V. 1958. Effectiveness of honey bees and bumble bees in the pollination of Montgomery red clover. New Zealand Journal of Agriculture Research 1(5):607-619. 190/61
- FOSTER, J. 1938. Pollenisation of red clover by honey bees in New Zealand. Honeybee 1(11):84-86.
- GRAENICHER, S. 1910. New Zealand's experience with the red clover and bumble bees. Bulletin of the Winsconsin Natural History Society 8:166-169.

Production, 21:166-175.

GURR, L. 1974. The role of bumblebees as pollinators of red clover and lucerne in New Zealand: a review and prospect. Proceedings of the New Zealand Grass land Association 36(1):111-122.

the New Zealand Society of Animal

- HALL, J.W.D. 1953. Bumble bees and harvest problems for red clover. New Zealand Farmer 74(7):10-11.
- HOLMES, C.E. 1973. Bee pollination of lucerne and clover crops for seed in New Zealand. B. Sc. (Hons) thesis, Canterbury University, 45 pp.
- McBURNEY, D. 1941. An introductory study of the flowering, fertilisation and seed setting of red clover <u>Trifolium</u> pratense with special reference to the part played by bumble bees and honey bees. M.Ag.Sci Thesis, University of New Zealand (Lincoln College), 95 pp.
- MACFARLANE, R.P.; GRIFFIN, R.P. 1985. An assessment of bumble bees and honey bees as pollinators of red clover. Proceedings of the 4th Australasian conference on grassland invertebrate ecology, Lincoln College, Canterbury, 13-17 May 1985, pp 114-120. 763/86
- MACFARLANE, R.P.; GRIFFIN, R.P.; READ, P.E.C. 1983. Bumble bee management options to improve "Grasslands Pawera" red clover seed yields. Proceedings of the New Zealand Grasslands Association 44:47-53. 50/84
- MONTGOMERY, B.E. 1951. The status of bumble bees in relation to the pollination of red clover in New Zealand. Proceedings of the annual Meeting of the North-Central Branch of the American Association of Economic Entomologists 6:51-55. 230/52
- MONTGOMERY, B.E. 1952. Bumble bees and red clover in New Zealand. New Zealand Science Review 10(4): 47-50.

- MONTGOMERY, B.E. 1960. The status of bumble bees and the pollination of red clover in New Zealand. Proceedings of the First International Symposium on Pollination, pp 204-207.
- MORRISON, L. 1957. Pollination of red clover. Annual Review of Canterbury Agricultural College 1957: 63-64.
- MORRISON, L. 1961. Pollination and seed-setting of red clover in scrim-covered cages. New Zealand Journal of Agricultural Research 4(5/6): 560-565. 862/65
- PALMER-JONES, T. 1967. Honey bees as pollinators of red clover. New Zealand Journal of Agriculture 114(1):34-35. 799/68
- PALMER-JONES, T; FORSTER, I.W.; CLINCH, P.G. 1966. Observations on the pollination of Montgomery red clover (<u>Trifolium pratense</u> L.). New Zealand Journal of Agricultural Research 9(3):738-747.
- SMITH, A. 1965. For more red clover we need more bumble bees. New Zealand Dairy Exporter 30:8-9.
- WRATT, E.C. 1968. Pollination of red clover and lucerne. Bee World 49(3):109-112. 479L/71

- 118 -

- 15. POLLINATION (Continued)
 - (c) POLLINATION OF LUCERNE
 (Medicago sativa L.)
 - DONOVAN, B.J. 1975. Introduction of new bee species for pollinating lucerne. Proceedings of the New Zealand Grassland Association 26(1): 123-128. 708L/76
 - DONOVAN, B.J. 1976. Lucerne pollination. In: Ferro, D.N. (ed.). New Zealand Insect Pests. Lincoln University College of Agriculture, pp 230-240.
 - DONOVAN, B.J.; READ, P.E.C. 1980. Lucerne seedsetting, the role of the leaf-cutter bee. New Zealand Journal of Agriculture 141(3): 67, 69, 71-72.
 - GURR, L. 1955. A note on the efficiency of <u>Bombus</u> <u>terrestris</u> (L.) as a pollinator of lucerne (<u>Medicago</u> sativa L.). New Zealand Journal of Science and Technology (A) 37(4):300.
 - GURR, L. 1974. The role of bumblebees as pollinators of red clover and lucerne in New Zealand: a review and prospect. Proceedings of the New Zealand Grassland Association 36(1): 111-122. 1071/78
 - HADFIELD, J.W.; CALDER, R.A. 1936. Lucerne (<u>Medicago</u> <u>sativa</u>). Investigations relative to pollination and seed production in New Zealand. New Zealand Journal of Science and Technology 17(4): 577-594.
 - HOLMES, C.E. 1973. Bee pollination of lucerne and clover crops for seed in New Zealand. B.Sc. (Hons) thesis, Canterbury University, 45 pp.
 - PALMER, T.P. 1966. Lucerne seed production in New Zealand. New Zealand Journal of Agricultural Science 1(7):21-24. 511/70
 - PALMER-JONES, T. 1967. Pollination of lucerne still a problem. New Zealand Journal of Agriculture 114(3):82-83. 798/68
 - PALMER-JONES, T. 1968. Lucerne pollination in New Zealand. New Zealand Journal of Agricultural Science 3(1):19-21.

- PALMER-JONES, T.; FORSTER, I.W. 1965. Observations on the pollination of lucerne (<u>Medicago</u> <u>sativa</u> Linn.). New Zealand Journal of Agriculture Research 8(2):340-349. 595/67
- PALMER-JONES, T.; FORSTER, I.W. 1972. Measures to increase the pollination of lucerne (<u>Medicago sativa</u> Linn.). New Zealand Journal of Agricultural Research 15(1):186-193. 971/73
- STARK, A.H. 1975. Bees' role in improving lucerne pollination. New Zealand Journal of Agriculture 131(1):27,29,57,59.
- TALBOYS, B.E. 1965. New species introduced to pollinate lucerne. New Zealand Beekeeper 27(2):10-11,27.
- WRATT, E.C. 1968. Pollination of red clover and lucerne in South Island, New Zealand. Bee World 49(3): 109-112.

- 120 -

15. POLLINATION (Continued)

(d) POLLINATION OF OTHER PASTURE CROPS

- BARKER, W.E. 1916. The farmer, bees and clover. New Zealand Beekeepers' Journal 22:364-366; 23:381-382.
- BEAVEN, A.W. 1893. Clover growing. New Zealand Country Journal 17: 482-483.
- BRANDENBURG, W. 1961. Broad beans: causes of poor yields sought. New Zealand Journal of Agriculture 102(3) 277-280. 443/63
- CANTERBURY AGRICULTURAL COLLEGE. 1945. Sweet clover. Agricultural Bulletin of the Canterbury Chamber of Commerce No. 193.
- COOK, V.A. 1972. Honey bee pollination of legumes, brassicas and sunflowers in North Otago. New Zealand Beekeeper 34(4):24-27. 901L/75
- FORSTER, I.W. 1966. Pollination of white clover. New Zealand Journal of Agriculture 113(2):50-53. 1022/70
- FORSTER, I.W. 1975. Behaviour and effectiveness of bees in pollinating legumes. Proceedings of the New Zealand Grassland Association 36(1):105-110.
- FORSTER, I.W.; CLINCH, P.G.; PALMER-JONES, T. 1973. Observations on the pollination of chou moellier (<u>Brassica oleracea</u> L.). New Zealand Journal of Experimental Agriculture 1(1):46-48. 970/73
- FORSTER, I.W.; JEFFERY, G.L.; PALMER-JONES, T. 1962. Factors causing losses of clover seed. New Zealand Journal of Agricultural Research 5(3,4): 326-330.
- GURR, L. 1962. The role of insects as pollinators of forage crops in New Zealand. Sheepfarming Annual 1962:67-64. 854L/62
- PALMER-JONES, T.; FORSTER, I.W. 1975. Observations on the pollination of sunflowers. New Zealand Journal of Experimental Agriculture 3(1): 95-97. 903/76

- PALMER-JONES, T.; FORSTER, I.W.; JEFFERY, G.L. 1962. Observations on the role of the honey bee and bumble bee as pollinators of white clover (<u>Trifolium repens</u> L.) in the Timaru district and Mackenzie country. New Zealand Journal of Agricultural Research 5(3,4):318-325. 932/63
- REID, G.M.; LANGFORD, G.I. 1973. Bees can increase pumpkin yields. Canterbury Growers' Review 11(403):5.
- SIMPSON, K.W. 1981. Honey bees: a missing link in high country maintenance? New Zealand Farmer 102(8):94-95.
- SIMPSON, K.W. (ed.) 1982. Developed hill and high country legume and pollination workshop, Alexandra 6-7 July 1982. Oamaru, Ministry of Agriculture and Fisheries, 39pp.
- TAYLOR, W.H. 1919. Bees and flower-fertilisation: the case of beans and peas. New Zealand Journal of Agriculture 18(4): 203-205.

WALSH, R.S. 1965. Pollinations of onion plants by honey bees. New Zealand Beekeeper 27(2):18-20. 352/66

- 122 -

- 15. POLLINATION (Continued)
 - (e) POLLINATION OF KIWIFRUIT (ACTINIDIA DELICIOSA)
 - ANONYMOUS. 1982. The pollination problem. Southern Horticulture 4:10-12.
 - ANONYMOUS. 1983. The beekeeping industry can meet pollination needs. New Zealand Beekeeper 177:13-16.
 - BERRY, R. 1982. No long term commitment by kiwifruit barons. New Zealand Beekeeper 43(3):32-33.
 - BRYANT, T.G. 1983. A realistic approach to kiwifruit pollination. New Zealand Beekeeper 179:27-29. 1019L/84
 - CHRISTIAN, G. 1981. Boom beehind kiwifruit. Straight Furrow.
 - CLINCH, P.G. 1984. Kiwifruit pollination by honey bees 1. Tauranga observations, 1978-81. New Zealand Journal of Experimental Agriculture 12:29-38. 67/385
 - CLINCH, P.G. 1985. Honey bee pollination. New Zealand Kiwifruit, November 1985:15.
 - CLINCH, P.G. 1986. Learning more about the honey bee. New Zealand Kiwifruit, February 1986:9.
 - CLINCH, P.G. 1986. Sex of flowers important to pollinating bees. New Zealand Kiwifruit, July 1986:12.
 - FORD, I. 1971. Chinese gooseberry pollination. New Zealand Journal of Agriculture 122(2):34-35.
 - GOODWIN, R.M. 1985. Honey bee habits under scientific scrutiny. New Zealand Kiwifruit, May 1985:15.
 - GOODWIN, R.M. 1986. Learning more about the honey bee and the flowers we hope it will pollinate. New Zealand Kiwifruit, February 1986:9.
 - GOODWIN, R.M. 1986. Increased kiwifruit pollen collection after feeding sugar syrup to honey bees within their hive. New Zealand Journal of Experimental Agriculture 14(1):57-61.

- GOODWIN, R.M. 1986. Kiwifruit flowers: anther dehiscence and daily collection of pollen by honey bees. New Zealand Journal of Experimental Agriculture 14(4): 449-452.
- HEATH, A. 1985. Wind pollination. New Zealand Kiwifruit, November 1985:15.
- HOLMES, N. 1982. Scientists forge ahead with artificial kiwifruit pollination. New Zealand Journal of Agriculture 145(1):36.
- HOPPING, M.J. 1981. Kiwifruit: hand pollination to improve fruit size. Orchardist of New Zealand 54(8):258.
- HOPPING, M.E. 1982. 80,000 honey bee hives not needed; spray pollination of kiwifruit possible by 1990. New Zealand Agricultural Science 16(1):46-48. 1162/84
- HOPPING, M.J.; JERRAM, E.M. 1980. Supplemental pollination of fruit trees. New Zealand Journal of Agricultural Research 23:509-515, 517-521.
- HOPPING, M.E.; JERRAM, E.M. 1979. Pollination of Japanese plums. Orchardist of New Zealand 52(4):104-106.
- IVENS, J.E.T. 1982. Kiwifruit pollination. Wellington, Development Finance Corporation of New Zealand, 54pp.
- JAY, D.H.; JAY, S.C. 1983. Honey bee dispersal studies in kiwifruit orchards. New Zealand Beekeeper 180:23.
- JAY, D.H.; JAY, S.C. 1983, 1984. Some observations of honey bees in kiwifruit orchards. New Zealand Beekeeper 180:21-22; Orchardist of New Zealand 57(3):114-115.
- JAY, D.H.; JAY, S.C. 1984. Observations of honey bees on Chinese gooseberries ("kiwifruit") in New Zealand. Bee World 65(4):155-166. 871/85
- MACFARLANE, R.P.; FERGUSON, A.M. 1984. Kiwifruit pollination: a survey of the insect pollinators in New Zealand. Proceedings of the fifth International Symposium on Pollination, Versailles, 1983, pp 367-373. 384/85

- McSHEAN, G. 1983. A new buzz in the kiwifruit. Orchardist of New Zealand 56(4):139. (use of bumble bees).
- MATHESON, A.G. 1986. Colony standards for kiwifruit pollination. New Zealand Beekeeper 189:20-22. 724/87
- MATHESON, A.G. 1986. Survey of kiwifruit pollination hives in Nelson. New Zealand Beekeeper 189:23-24. 723/87
- PALMER-JONES, T.; CLINCH, P.G. 1974. Observations on the pollination of Chinese gooseberries variety 'Hayward'. New Zealand Journal of Experimental Agriculture 2(4):455-458. 899/76
- PALMER-JONES, T.; CLINCH, P.G. 1975. Honey bees essential for kiwifruit pollination. Orchardist of New Zealand 48(10):347. 1391/77
- PALMER-JONES, T.; CLINCH, P.G.; BRISCOE, D.A. 1976. Effect of honey bee saturation on the pollination of Chinese gooseberries variety 'Hayward'. New Zealand Journal of Experimental Agriculture 4(2):255-256. 1392/77
- REID, G.M. 1982. Proceedings of kiwifruit pollination seminars Hamilton and Tauranga. Hamilton, Ministry of Agriculture and Fisheries, 82 pp. 1342/84
- REID, G.M. 1983. Canadian researcher answers many questions and asks many more. New Zealand Beekeeper 178:13-14.
- SALE, P.R.; BRISCOE, D.A. 1972. Chinese gooseberry (kiwifruit) pollination service. New Zealand Journal of Agriculture 125(3):49-51. 302L/76
- SALE, P.R. 1981. Kiwifruit, pollination, male to female ratios and bee activity. Wellington, Ministry of Agriculture and Fisheries, 3 pp (AgLink HPP233).
- WALLINGFORD, N. 1986. Artificial pollination of kiwifruit - some history and observations. New Zealand Beekeeper 191:7-9.
- WEARING, C.M. 1984. Review of kiwifruit pollination research. Orchardist of New Zealand 57(3):118-119.

15. POLLINATION (Continued)

(f) POLLINATION OF OTHER FRUIT CROPS

BARKER, W.E. 1915. The importance of the honey bee to the fruit growing district. New Zealand Beekeepers' Journal 13:219-220.

BARTON, K. undated. The pollination and fruit set of blackcurrants. Unpublished project, Lincon University College of Agriculture, 62 pp.

BERRY, I. 1980. Bees: the pollinators. New Zealand Journal of Agriculture 140 (6):67-68.

- BRYANT, T.G. 1982. Blackcurrant pollination. 2. Pollinating species and their behaviour. New Zealand Commercial Grower 37(7):42-43. (Reprinted as: It's no place for the weak'. Southerner 17(20):, 1982).
- CLINCH, P.G.; FAULKE, J. 1976. Observations on the role of the honey bee in the pollination of black currants - variety 'Magnus'. New Zealand Journal of Experimental Agriculture 4(4):399-402.
- HOPKINS, I. 1918. Bees in relation to fruit growing. New Zealand Beekeepers' Journal 2(6):92-94; 2(7):102-103.
- HOPPING, M.E.; JERRAM, E.M. 1979. Pollination of Japanese plums. Orchardist of New Zealand 52(4):104-106.
- HORTICULTURE DIVISION 1946. Bees' part in setting of fruit. New Zealand Journal of Agriculture 73(4):345.
- JACOBSEN, F.A. 1918. The influence of bees on fruit crops. New Zealand Journal of Agriculture 16(4):205-209.
- MATHESON, A.G. 1982. Blackcurrant pollination. 1. How pollination occurs in the blackcurrant plant. New Zealand Commercial Grower 37(7):42. (Reprinted as: Pollen process. Southerner 17(19):9, 1982).
- MATHESON, A.G. 1982. Pollinating blackcurrants with the honey bee. New Zealand Farmer 103(21):96-97,99. 320L/85

PALMER-JONES, T.; CLINCH, P.G. 1966. Observations on the pollination of apple trees (<u>Malus</u> <u>sylvestris</u> Mill.). I. Variety Cox's Orange Pippin. New Zealand Journal of Agricultural Research 9(2):191-196. 2-3/67

PALMER-JONES, T.; CLINCH, P.G. 1967. Observations on the pollination of apple trees (<u>Malus</u> <u>sylvestris</u> Mill.). II. Varieties Granny Smith, Sturmer, Jonathan and Cox's Orange Pippin. New Zealand Journal of Agricultural Research 10(1):143-149. 601/67

- PALMER-JONES, T.; CLINCH, P.G. 1968. Observations on the pollination of apple trees (<u>Malus</u> <u>sylvestris</u> Mill.) III. Varieties - Granny Smith. Kidd's Orange Red and Golden Delicious. New Zealand Journal of Agricultural Research 11(1):149-154. 1027/70
- PALMER-JONES, T.; CLINCH, P.G. 1968. Honey bees essential for pollination of apple trees. New Zealand Journal of Agriculture 116(5):32-33. 515/70
- ROBERTS, D. 1952. Honey bees and pollination of orchard fruits. New Zealand Journal of Agriculture 84(6):465-466.
- ROBERTS, D. 1956. Sugar sprays aid fertilisation of plums by bees. New Zealand Journal of Agriculture 93(3):205-211. 248/59
- ROBERTS, D.; CONGDON, N.B. 1955. The relationship of nectar secretion (volume) and sugar concentration to insect pollination of plums (<u>Prunus</u> spp.). New Zealand Journal of Science and Technology (A) 37(3):196-206.
- SALE, P.R. 1978. Subtropical fruit, pollination, an introduction. Wellington, Ministry of Agriculture and Fisheries, 2 pp (AgLink HPP 97). (kiwifruit, avocado, feijoa, passionfruit).
- SIMPSON, K.W. 1982. Blackcurrant pollination. 3. Getting the best value for your pollination dollar; pollination management by growers. New Zealand Commercial Grower 37(7):43. (Reprinted as: The need to communicate. Southerner 17(21), 1982).

SMITH, A.W.; BALLINGER, J.P.; REID, G.M. 1973. Raspberry pollination in Canterbury. New Zealand Journal of Agriculture 127(4):50-51. WATTS, A.T.J. 1953. Pollination of Japanese plums. New Zealand Journal of Agriculture 87(1):20.
WOOD, G.J. 1975. Pollination trial on black currants. New Zealand Beekeeper 37(2):51.

WOODHEAD, C.E.; WATTS, A.T.J. 1955. Pollinators for pip and stone fruit varieties. New Zealand Journal of Agriculture 91(2):151-157.

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- 16. BEES (APOIDEA) EXCEPT APIS
 - (a) NEW ZEALAND BUMBLE BEE SPECIES AND THEIR INTRODUCTION
 - ANONYMOUS. 1885. Humble bees successfully introduced into New Zealand. Entomologist's monthly magazine 21:255-256.
 - ANONYMOUS. 1945. Red clover and bumble bees. Canterbury Chamber of Commerce Agricultural Bulletin 190, 4 pp.
 - BELT, T. 1878. The importation of humble-bees into New Zealand. Science Gossip, London 14:89-90.
 - "CHOTA BHAI" 1924. The humble-bee in Canterbury: the history of its introduction. The New Zealand Fruitgrower and Apiarist 6(5):285-286.
 - COCKAYNE, L. 1891. Humble-bees. New Zealand Journal of Science (new series) 1:74-75.
 - DONOVAN, B.J. 1974. Bees of the world. Part III; Bumble bees in New Zealand. New Zealand Beekeeper 36(3):49-55. 950L/76
 - DUMBLETON, L.J. 1949. Bumble bee species in New Zealand. New Zealand Journal of Science and Technology (A) 29(6):308-312.
 - DUNNING, J.W. 1886. Acclimatisation of humble-bees in New Zealand. Proceedings of the Entomological Society of London 1886:32-34.
 - FARR, S.C. 1886. The humble-bee. New Zealand Country Journal 10:332-336.
 - FARR, S.C. 1889. Introduction of the humble bee into New Zealand. New Zealand Country Journal 13:284-287; 489-493.
 - FARR, S.C. 1891. Humble bees. New Zealand Country Journal 15:126-128.
 - GURR, L. 1957. Bumble bee species present in the South Island of New Zealand. New Zealand Journal of Science and Technology (A) . 38(9):997-1001. 288/60

- GURR, L. 1964. The distribution of bumblebees in the South Island of New Zealand. New Zealand Journal of Science 7(4):625-642. 688/65
- GURR, L. 1972. The introduction of bumblebees into North Island, New Zealand. New Zealand Journal of Agricultural Research 15(3):635-638. 54/76
- HILGENDORF, F.W. 1905. Bumble bees in Canterbury. Lincoln College Magazine :13-22.
- HOPKINS, I. 1884. Arrival of humble bees at Matamata. New Zealand and Australian Bee Journal 1(9):101.
- HOPKINS, I. 1914. History and the humble-bee in New Zealand: its introduction and results. New Zealand Department of Agriculture Bulleting 46(new series) 29 pp.
- HOPKINS, I. 1916. The first humble-bees in New Zealand. New Zealand Journal of Agriculture 13(2):142-143.
- HOPKINS, I. 1917. Humble bees in New Zealand. New Zealand Journal of Agriculture 15(4):184.
- HUDSON, G.V. 1937. Humble bees. New Zealand Journal of Science and Technology 18(8):650.
- MACFARLANE, R.P. 1985. Working towards a useful subgeneric classification in <u>Bombus</u>: a view point. Sphecos 10:14-15. 775L/85
- NOTTIDGE, T. 1884. Note on the importation of humblebees into New Zealand. Transactions of the Entomological Society of London 1884:3.
- NOTTIDGE, T. 1890. The introduction of humble-bees into New Zealand. New Zealand Country Journal 14:190-202.
- OMEROD, E.A. 1895. The humble-bee. New Zealand Country Journal 19:281-283.
- POOLE, O. 1888. Humble-bees. Australasian Bee Journal 2(3):43-45.
- SLADEN, F.W.L. 1912. Bombus terrestris L. and B. ruderatus F. (= subterraneus Smith) in New Zealand. Entomologist's Monthly Magazine 48:66.

SMITH, F. 1876. Exportation of humble-bees to New Zealand. Entomologist 9:15-16.
THOMSON, G.M. 1891. The humble-bee in New Zealand. New Zealand Journal of Science (new series) 1:16-26.
THOMSON, G.M. 1922. The naturalisation of animals and plants in New Zealand. Cambridge University Press, pp 273-279.

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16. BEES (APOIDEA) EXCEPT APIS (Continued)

(b) BUMBLE BEES: BIOLOGY AND MANAGEMENT

ANONYMOUS. 1981. Lack of honey bees turns DSIR eyes to the humble bumble bee. Southern Horticulture 2:51,53-54.

ANONYMOUS. 1984. Bumble bee groomed for kiwifruit contribution. Apiarist 36:1-2.

CANTERBURY AGRICULTURAL COLLEGE. 1945. Red clover and bumble bees. Canterbury Chamber of Commerce Agricultural Bulletin No. 190.

CLIFFORD, P.T.P. 1973. Increasing bumble bee densities in red clover seed production areas. New Zealand Journal of Experimental Agriculture 1(4):377-379. 615/76

- CUMBER, R.A. 1949. An overwintering nest of the bumble-bee <u>Bombus</u> <u>terrestris</u> (L.) (Hymenoptera, Apidae). New Zealand Science Review 7:96-97.
- CUMBER, R.A. 1953. Life cycle of the humble-bee. New Zealand Science Review 11:92-98.
- CUMBER, R.A. 1954. The life cycle of humble-bees in New Zealand. New Zealand Journal of Science and Technology (B) 36(1):95-107. 89/55
- CUMBER, R.A. 1963. Studies on an unusually large nest of <u>Bombus terrestris</u> (L.) (Hymenoptera, Apidae) transferred to an observation box. New Zealand Journal of Science 6:66-74.
- DONOVAN, B.J. 1978. Anaphylactic shock and strong cardiac stimulation caused by stings of the bumble bee <u>Bombus terrestris</u> (Hymenoptera:Apidae). New Zealand Entomologist 6(4):385-389.
- DONOVAN, B.J. 1980. Interactions between native and introduced bees in New Zealand. New Zealand Journal of Ecology 3:104-116.
- DONOVAN, B.J.; MacFARLANE, R.P. 1971. A nest of <u>Bombus</u> <u>hortorum</u> (Hymenoptera) in a fur coat in <u>New Zealand</u>. New Zealand Entomologist 5(1):83-84. 2926/73

- DONOVAN, B.J.; WIER, S.S. 1978. Development of hives for field population increase, and studies on the life cycles of the four species of introduced bumble bees in New Zealand. New Zealand Journal of Agricultural Research 21(4):733-756. 323/81
- DOULL, K.M. 1954. Bumble-bees. Lincoln College Rural Education Bulletin 9(7):98-103; 9(8):114-118; 9(9):130-135.
- GURR, L. 1957. Seasonal availability of food and its influence on the local abundance of species of bumble bees in the South Island of New Zealand. New Zealand Journal of Science and Technology (A) 38(8):867-870.
- GURR, L. 1973. Evidence of overwintering nests of <u>Bombus hortorum</u> and <u>Bombus ruderatus</u> (Hymenoptera, Apidae) in New Zealand. New Zealand Entomologist 5(3,4):339-341. 600/75
- GURR, L. 1975. Some adaptive mechanisms affecting the distribution of bumble bees in New Zealand. Proceedings of the New Zealand Ecological Society 22:112-113.
- HUDSON, G.V. 1921. Pairing of <u>Bombus</u> <u>terrestris</u> in New Zealand. Entomologist's Monthly Magazine. 57:65.
- JACOBSEN, F.A. 1911. Peculiar home of bumble-bees. New Zealand Journal of Agriculture 2(5):296.
- MACFARLANE, R.P. 1975. The nematode <u>Sphaerularia</u> <u>bombi</u> (Sphaerulariidae) and the mite <u>Locustacurus</u> <u>buchneri</u> (Podapolipidae) in <u>bumble</u> bee queens <u>Bombus</u> spp. (Apidae) in New Zealand. New Zealand Entomologist 6(1):79.
- MACFARLANE, R.P.; GRIFFIN, R.P.; READ, P.E.C. 1983. Bumble bee management options to improve 'Grasslands Pawera' red clover seed yield. Proceedings of the New Zealand Grassland Association 44:47-53. 50/84
- MACFARLANE, R.P.; GRIFFIN, R.P.; READ, P.E.C. 1984. Hives for management of bumble bees in New Zealand. Proceedings of the Fifth International Symposium on Pollination, Versailles, 1983, pp 435-441. 691/85

- McSHEAN, G. 1983. Massey joins the bumble bee brigade. New Zealand Beekeeper 178:14-15.
- MEYER-ROCHOW, V.B. 1980. Electrophysiologically determined spectral efficiencies of the compound eye and median ocellus in the bumble bee <u>Bombus hortorum tarhakimalainen</u> (Hymenoptera, Insecta). Journal of Comparative Physiology (A) 139(4):261-266.
- MEYER-ROCHOW, V.B. 1981. Electrophysiology and historology of the eye of the bumble bee <u>Bombus hortorum</u> (L.) (Hymenoptera : Apidae). Journal of the Royal Society of New Zealand 11(2):123-153. 1123/83
- PALMER, T.P. 1968. Establishment of bumble bees in nest boxes at Christchurch. New Zealand Journal of Agricultural Research 11(3):734-739. 1030/70
- POMEROY, N. 1979. Brood bionomics of <u>Bombus ruderatus</u> in New Zealand (Hymenoptera : Apidae). Canadian Entomologist 111(8):865-874. 398/82
- POMEROY, N. 1981. Use of natural sites and field hives by a long-tongued bumble bee <u>Bombus</u> <u>ruderatus</u>. New Zealand Journal of Agricultural Research 24(3,4):409-414. 76/83
- POMEROY, N. 1982. Bumble bees. Part I. Small Farmer 22:52-53.
- POMEROY, N. 1983. Bumble bees. Part 2: Management for pollination. Part 3: Indoor rearing. Small Farmer 23:24:16,1718,20.
- SMITH, W.W. 1896. Enemies of humble-bees in New Zealand. Entomologist 29:210-212.
- SMITH, W.W. 1898. Humble bees in New Zealand killed by native birds. Entomologist 31:95.

16. BEES (APOIDEA) EXCEPT APIS (Continued)

(c) BEES OTHER THAN APIS AND BOMBUS

CAMERON, P. 1900. Description of a new species of <u>Halictus</u> (Andrenidae) from Christchurch, New Zealand. Transactions and Proceedings of the New Zealand Institute 32:17-19.

- COCKERELL, T.D.A. 1905. Descriptions and records of bees, part 3. Annals and Magazine of Natural History Series 7 16:301-308.
- COCKERELL, T.D.A. 1905. Notes on some bees in the British Museum. Transactions of the American Entomological Society 31:209-364.
- COCKERELL, T.D.A. 1909. Descriptions and records of bees, part 22. Annals and Magazine of Natural History Series 8 4:309-317; 393-404.
- COCKERELL, T.D.A. 1916. Some bees from Australia, Tasmania and the New Hebrides. Proceeds of the Academy of Natural Science of Philadelphia 1916:360-375.
- COCKERELL, T.D.A. 1925. Some bees from New Zealand. Annals and Magazine of Natural History (9)15:550-553.
- DONOVAN, B.J. 1967. Bionomics of the New Zealand native bee <u>Leioproctus</u> <u>boltoni</u> Cockerell. M.Sc. thesis, Auckland University, 218 pp.
- DONOVAN, B.J. 1974, 1975. Bees of the world. Part I: what is a bee? New Zealand Beekeeper 36(2): 44-47; Part II: Native bees of New Zealand 36(2): 47-53; Part V: Alkali bees in New Zealand 37(1): 33-39, 46; Part VI: Leafcutter bees in New Zealand 37(2): 43-50. 950L/76
- DONOVAN, B.J. 1975. Introduction of new bee species for pollinating lucerne. Proceedings of the New Zealand Grassland Association 36(1):123-128. 950L/76
- DONOVAN, B.J. 1979. The correct names of the megachilid bee introduced for lucerne pollination (Hymenoptera: Megachilidae). New Zealand Entomologist 7(1):63.

- DONOVAN, B.J. 1979. Importation, establishment and propagation of the alkali bee, <u>Nomia</u> <u>melanderi</u> Cockerell (Hymenoptera : <u>Halictidae</u>) in New Zealand. Proceedings of the Fourth International Symposium on Pollination, Maryland, (1978):257-268. 399/80
- DONOVAN, B.J. 1980. Interactions between native and introduced bees in New Zealand. New Zealand Journal of Ecology 3:104-116. 724/82
- DONOVAN, B.J. 1983. Comparative biogeography of native Apoidea of New Zealand and New Caledonia. Geojournal 7(6):511-516. 61/85
- DONOVAN, B.J. 1983. Occurrence of the Australian bee <u>Hyleiodes concinna</u> (Hymenoptera: Colletidae) in New Zealand. New Zealand Journal of Zoology 10:345-347. 117L/85
- DONOVAN, B.J. 1984. Chalkbrood in New Zealand. Australian Bee Journal 65(9):7. (Chalkbrood of leafcutter bees). 1137L/85
- DONOVAN, B.J.; READ, P.E.C. 1979. Alkali bee establishment and maintenance for lucerne pollination. Lincoln, Entomology Division of Department of Scientific and Industrial Research, 11 pp.
- DONOVAN, B.J.; READ, P.E.C. 1980. Lucerne seedsetting, the role of the leaf-cutter bee. New Zealand Journal of Agriculture 141(3): 67,69,71-72.
- DONOVAN, B.J.; READ, P.E.C. 1984. Is leafcutting bee investment warranted? The answer is clearly yes! New Zealand Journal of Agriculture 149(4):2-3. 705L/86
- DONOVAN, B.J.; READ, P.E.C.; WIER, S.S.; GRIFFITH, R.P. 1982. Introduction and propagation of the leafcutting bee <u>Megachile rotundata</u> (F.) in New Zealand. Proceedings of the First International Symposium on Alfalfa Leafcutting Bee Management, University of Saskatchewan, pp 212-222.

- MCKINNON, D. 1983. Leafcutter bees tripping through the florets. New Zealand Farmer 104 (1):8-10.
- MICHENER, C.D. 1965. A classification of the bees of the Australian and South Pacific regions. Bulletin of the American Museum of Natural History 130:1-362.
- MILLER, D. 1971. Bees. In Common insects in New Zealand. Wellington, A.H. & A.W. Reid pp20-24.
- READ, P.E.C.; DONOVAN, B.J. 1979. Leafcutting bee life history, allocation details and management techniques. Lincoln Entomology Division of Department of Scientific and Industrial Research, 2 pp. (second edition 1980, 24 pp).
- SHARELL, R. 1971. New Zealand insects and their story. Auckland, Collins, pp173-188. 664/75
- WALTON, G.M. 1967. What is a bee? New Zealand Journal of Agriculture 114(1):53.

- 137 -

- ANONYMOUS. 1971. Better methods of wasp control. New Zealand Beekeeper 33(4): 14-15. APIARY SECTION. 1974. Controlling wasps. Christchurch, New Zealand, Ministry of Agriculture and Fisheries Bulletin, 6pp. BANKS, C.C. 1968. Wasps nests. New Zealand Journal of Agriculture 116 (2):64-67. DALLAS, W.K. 1948. Wasp control measures. New Zealand Beekeeper 10(4): 10-11. DONOVAN, B.J. 1983. The common wasp is here. New Zealand Beekeeper 180:9-10. DONOVAN, B.J. 1984. Occurrence of the common wasp, Vespula vulgaris (L.) (Hymenoptera : Vespide), in New Zealand Journal of Zoology 11:417-427. 751/86 DONOVAN, B.J. 1985. Wasp control. Weta 8(2):41-44. FORDHAM, R.A. 1961. Notes on the German wasp Vespula germanica. Tuatara 9: 24-31. HARRIS, A.C. 1979. Occurrence and nesting of the yellow oriental paper wasp, <u>Polistes</u> olivaceus (Hymenoptera : Vespidae), in New Zealand. New Zealand Entomologist 7(1):41-44. HELSON, G.A. 1974. European wasp. Wellington, New Zealand, Ministry of Agriculture and Fisheries. Bulletin No. 413, pp 108-111. HORTICULTURE DIVISION. 1947. Control of wasps. New Zealand Beekeeper 9(2):28-30. KIRK, T.W. 1894. Wasps (Polistes tasmaniensis). New Zealand Department of Agriculture, Wellington, 2nd Annual Report, pp 101-102. LINE, L.J.S. 1965. Preventing wasp raids on beehives. New Zealand Journal of Agriculture 110(2):161. 822L/65 MATHESON, A.G. 1984. Wasps, social species, description and control. Wellington,
 - description and control. Wellington, Ministry of Agriculture and Fisheries, 4 pp. (AgLink FPP196). 249L/85

- NEW ZEALAND JOURNAL OF AGRICULTURE. 1945. Waikato wasps. New Zealand Journal of Agriculture 70(6):648.
- NEW ZEALAND JOURNAL OF AGRICULTURE. 1946. Wasps in New Zealand. New Zealand Journal of Agriculture 71(6):561-562.
- NEW ZEALAND JOURNAL OF AGRICULTURE. 1954. Control of wasps in New Zealand. New Zealand Journal of Agriculture 89(6):561-564.
- PALMER-JONES, T. 1955. Dust gun for insecticides operated by carbon dioxide. New Zealand Journal of Agriculture 91(1):79-80.
- PALMER-JONES, T.; DEVINE, B.W. 1948. Destruction of queen wasps by spraying. New Zealand Journal of Agriculture 77(6):557-558.
- PATERSON, C.R. 1948. Spread of wasp nuisance. New Zealand Journal of Agriculture 77(3):271-272.
- PATERSON, C.R. 1949. Combating wasps: recommended practices for beekeepers. New Zealand Journal of Agriculture 79(5): 457-458.
- PATERSON, C.R.; THOMAS, C.R. 1950. Combating wasps in New Zealand. New Zealand Journal of Agriculture 81(5):459-460.
- PATERSON, C.R.; THOMAS, C.R. 1951. European wasp: adaptations to New Zealand conditions. New Zealand Journal of Agriculture 83(1):16.
- PERROTT, D.C.F. 1975. Factors affecting use of mirexpoisoned protein baits for control of European wasp (<u>Paravespula germanica</u>) in New Zealand. New Zealand Journal of Zoology 2(4):491-508.
- THOMAS, C.R. 1951. The European wasp (Vespula germanica) in New Zealand. Royal Society of New Zealand, Report of the 7th Science Congress pp92-96.
- THOMAS, C.R. 1960. The European wasp (Vespula germanica) in New Zealand. Department of Scientific and Industrial Research Information Series Publication No 27, 75 pp.

WALLINGFORD, N. 1982. Destroying wasp nests. New Zealand Beekeeper 43(2):14-15. 612L/83
WALTON, G.M.; REID, G.M. 1976. The 1975 New Zealand European wasp survey. New Zealand Beekeeper 38(92):26-30. 258L/78

- 140 -

WALLINGFORD, N. 1982. Destroying wasp nests. New Zealand Beekeeper 43(2):14-15. 612L/83 WALTON, G.M.; REID, G.M. 1976. The 1975 New Zealand

- 140 -

European wasp survey. New Zealand Beekeeper 38(92):26-30. 21 258L/78

- NEW ZEALAND JOURNAL OF AGRICULTURE. 1945. Waikato wasps. New Zealand Journal of Agriculture 70(6):648.
- NEW ZEALAND JOURNAL OF AGRICULTURE. 1946. Wasps in New Zealand. New Zealand Journal of Agriculture 71(6):561-562.
- NEW ZEALAND JOURNAL OF AGRICULTURE. 1954. Control of wasps in New Zealand. New Zealand Journal of Agriculture 89(6):561-564.
- PALMER-JONES, T. 1955. Dust gun for insecticides operated by carbon dioxide. New Zealand Journal of Agriculture 91(1):79-80.
- PALMER-JONES, T.; DEVINE, B.W. 1948. Destruction of queen wasps by spraying. New Zealand Journal of Agriculture 77(6):557-558.
- PATERSON, C.R. 1948. Spread of wasp nuisance. New Zealand Journal of Agriculture 77(3):271-272.
- PATERSON, C.R. 1949. Combating wasps: recommended practices for beekeepers. New Zealand Journal of Agriculture 79(5): 457-458.
- PATERSON, C.R.; THOMAS, C.R. 1950. Combating wasps in New Zealand. New Zealand Journal of Agriculture 81(5):459-460.
- PATERSON, C.R.; THOMAS, C.R. 1951. European wasp: adaptations to New Zealand conditions. New Zealand Journal of Agriculture 83(1):16.
- PERROTT, D.C.F. 1975. Factors affecting use of mirexpoisoned protein baits for control of European wasp (<u>Paravespula germanica</u>) in New Zealand. New Zealand Journal of Zoology 2(4):491-508.
- THOMAS, C.R. 1951. The European wasp (Vespula germanica) in New Zealand. Royal Society of New Zealand, Report of the 7th Science Congress pp92-96.
- THOMAS, C.R. 1960. The European wasp (<u>Vespula</u> <u>germanica</u>) in New Zealand. Department of Scientific and Industrial Research Information Series Publication No 27, 75 pp.