

trees. In 1966, however, after an application of oil on July 9, approximately 15% of the primary leaves of the Delicious apple trees yellowed and dropped. Oil sprays will be continued on these plots to determine if this

symptom was an indication of cumulative oil injury.

Acknowledgements

It is a pleasure to acknowledge the able assistance of Messrs. W. W. Davis and T. K. Moilliet of this laboratory.

References

- Chapman, P. J. and G. W. Pearce. 1959. Tree spray oils—their present status. N. Y. (Geneva) Agr. Expt. Sta. Farm Res. 25(1):7.
- Downing, R. S. 1958. Recent trials with new acaricides in British Columbia orchards. Can. J. Plant Sci. 38:61-66.
- Downing, R. S. 1966a. Quinoxalines as orchard acaricides in British Columbia. Can. Entomol. 98:134-138.
- Downing, R. S. 1966b. The effect of certain miticides on the predaceous mite *Neoseiulus caudiglans* (Acarina: Phytoseiidae). Can. J. Plant Sci. 46:521-524.
- Henderson, C. F. and H. Y. McBurnie. 1943. Sampling technique for determining populations of citrus red mite and its predators. U.S. Dept. Agr. Circ. 671.
- Hikichi, A. and H. Wagner. 1965. Bark injury on Red Delicious apple trees sprayed with oil emulsions in the delayed dormant period. Pesticide Progress 3:59-61.
- Marshall, J. 1948. Oil spray investigations in British Columbia. J. Econ. Entomol. 41: 592-595.
- Morgan, C. V. G. et al. 1955. Methods for estimating orchard mite populations, especially with the mite brushing machine. Can. Entomol. 87:189-200.
- Pearce, G. W. and P. J. Chapman. 1947. Improved spray oils for fruit trees. N. Y. (Geneva) Agr. Exp. Sta. Farm. Res. 13(2):1.
- Schuster, R. O. and A. E. Pritchard. 1963. Phytoseiid mites of California. Hilgardia 34:191-285.

A CERAMBYCID IN A CITY APARTMENT

In April, 1967, I was asked to identify a beetle which had emerged from oak flooring on the eighth floor of a 10-storey apartment building in Vancouver. The building was of reinforced concrete, with a "floating floor" on each level. This type of floor, from top to bottom, consists of 5 16-inch kiln-dried oak, 5/8-inch fir plywood, 3/4-inch air-dried white spruce and 7 16-inch rigid fibre board insulation as a base, all resting on the concrete. The apartment was completed in May, 1966, and the flooring was laid at this time. In December, 1966, a larva was seen in a hole in the floor on the 7th storey. This was noticed by the owners after a tenant had moved, in an area which had been covered by a rug. In March, 1967, a beetle was found emerging from a hole in the floor on the 8th storey. The beetle was identified as the cerambycid *Meriellum proteus* (Kirby).

The life history of this boreal species is not well known. Its host plants

include pine, spruce and balsam fir (Gardiner, 1957) in which the larvae feed in the phloem.

The spruce sub-flooring in this apartment, originating from the Kamloops area, was known to include a few boards with bark attached. This was confirmed when the damaged oak was replaced. These boards must have harbored the beetles. The mature larvae left the phloem, gnawed through the plywood and partially through the oak to pupate just beneath the surface. The adult then emerged prematurely in the spring. The flight period, according to Linsley (1964), is June and July.

Gardiner, L.M. 1957. Deterioration of fire-killed pine in Ontario and the causal wood-boring beetles. Canad. Ent. 29:241-262.

Linsley, E. G. 1964. The Cerambycidae of North America. Univ. Calif. Publ. Entom. 22:25-27.

P. Zuk,
Research Station, C.D.A.
Vancouver, B.C.