

UNUSUAL DAMAGE TO POTATOES BY THE TWO-SPOTTED SPIDER MITE, *TETRANYCHUS TELARIUS* (L.), IN THE LOWER FRASER VALLEY¹

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Early in July, 1956, it was observed that the tops of late Netted Gem potatoes were browning and dying off in a 14-acre field at Sardis, British Columbia. Investigation showed that the damage was caused by large numbers of the two-spotted mite, *Tetranychus telarius* (L.)³. Infested areas were particularly noticeable at the edge of the field adjoining a ditch and hedge-row of weeds and brush. Later in July and during August similar damage was found in potato fields at Colebrook and Cloverdale. Although this mite has been recorded as a pest of potatoes in Washington and Idaho, this is the first time to the writer's knowledge that it has damaged potatoes in British Columbia. Large populations of the mite were also observed on sweet corn, pole beans, and marigolds at different locations.

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The factors favouring the outbreak are not clearly understood. The summer was generally hot and dry but no records were set. However, general weather conditions must have been favourable for the rapid multiplication of the mites. A possible contributory factor is the widespread use of DDT to control the tuber flea beetle. Various researchers have shown that use of DDT is followed by an increase in the abundance of mites. Some say that the natural predators are killed (Pickett, 1949); others claim that mites exposed to DDT lay more eggs (Hueck, 1955); still others state that the insecticide brings about changes in plant nutrition and composition (Klostermeyer and Rasmussen, 1953).

The situation is worth watching since one or more of the recently introduced control practices for other potato pests may favour increase of the mite.

References

- Pickett, A. D. A critique on insect chemical control methods. *Can. Ent.* 81: 67-76. 1949.
- Hueck, H. J. The population-dynamics of the fruit tree red spider with special reference to the influence of DDT. *Proefschr. Rijksuniv, Leiden*, 148 pp., 1953. *Rev. Appl. Ent.* (A) 43: 340-342. 1955.
- Klostermeyer, E. C. and W. B. Rasmussen. The effect of soil insecticide treatments on mite population and damage. *J. Econ. Ent.* 46: 910-912. 1953.

The Wharf Borer in a Vancouver Branch Library

In June, 1956, I was asked to investigate some beetles which the librarians of a branch library had found flying around the premises and had tentatively identified from literature as *Nacerda melanura* (L.), the wharf borer. Their identification was correct.

In volume 43 of the Proceedings of our Society, I published an article "An unusual record of the wharf borer in buried piling", reporting that this beetle bred at tidewater in piling that had been covered by a slab of concrete for thirty years. The branch

library is a one-storey, 1500 square foot building, located on top of a little hill with natural drainage on all sides. There is no basement and only small ventilator openings in front, so that most of the floor is over a dead air space. In February, 1957, the library was closed for 10 days for repairs to the floor and I was able to procure half a sinkful of sodden black lumber which the carpenters had thrown out from underneath the floor. Some 16 *N. melanura* emerged from this material in the course of the next six weeks.