

TABLE I  
EMERGENCE OF *Contarinia Oregonensis* LARVAE FROM DOUGLAS-FIR CONE SCALES  
UNDER DIFFERENT TEMPERATURE AND MOISTURE CONDITIONS

Temperature (°C.)	Moisture*	No. of larvae		
		Total	Emergenced	
			No.	%
0	1	49	0	0
	2	46	2	4.3
	3	89	74	64.2
	4	61	51	82.0
5	1	45	0	0
	2	24	5	20.8
	3	67	60	89.5
	4	73	65	88.0
10	1	61	0	0
	2	43	10	23.2
	3	54	46	85.2
	4	45	43	95.5
15	1	24	0	0
	2	39	16	41.0
	3	39	22	56.4
	4	43	30	69.8
20	1	42	0	0
	2	29	1	3.4
	3	33	11	33.3
	4	57	27	47.4

\* 1. Dry; 2. Moist; 3. Wet; 4. Saturated.

TABLE II  
COMPARISON OF EMERGENCE AT FOUR MOISTURE LEVELS

Moisture level.....	1	2	3	4
Per cent emergenced.....	0	18.5	65.7	76.5

TABLE III  
COMPARISON OF EMERGENCE AT FIVE TEMPERATURES

Temperature (°C.).....	0	5	10	15	20
Per cent emergenced.....	37.6	49.6	51.0	41.8	21.0

**Nematode Assays of some Forest and Nursery Soils in British Columbia.**—In a project conducted by the Plant Pathology Laboratory at Saanichton and the Forest Pathology Unit in Victoria, soil samples from forest nurseries at Camp-

bell River, Duncan, New Westminster, and Cranbrook, and from the West Kootenay forest region were examined in 1958 for the presence of plant-parasitic nematodes.

Twenty-one sites in the West Kootenay region were sampled five times at monthly intervals. Small populations of ring nematodes, *Cricemoides* spp. (pathogenic), were found in 65 of 104 samples, representing 20 sites. Saprogenous nematodes included species of the following genera: *Alaimus*, *Aphelenchoides*, *Cephalobus*, *Cervidellus*, *Chiloplacus*, *Diplogaster*, *Dorylaimus*, *Mononchus*, *Pungentus*, *Rhabditis*, *Tylenchus*, and *Wilsonema*.

Duncan, Campbell River, New Westminster, and Cranbrook nurseries were sampled only once during the summer. Trace populations of *Xiphinema* sp. (pathogenic), were found in one sample from Duncan and in one sample from Campbell River. No plant-parasitic nematodes were found in samples from New Westminster or Cranbrook. Saprogenous nematodes from forest nurseries included the following genera: *Aphelenchus*, *Aphelenchoides*, *Cervidellus*, *Chiloplacus*, *Diplogaster*, *Dorylaimus*, *Mononchus*, *Rhabditis*, and *Tylenchus*.

In all the samples, nematodes of both parasitic and saprogenous genera were much less numerous than in agricultural soils. The results suggest that plant-parasitic nematodes are not a disturbance factor in the areas examined.—P. J. Salisbury, Victoria Forest Biology Laboratory, and J. E. Boshier, Saanichton Plant Pathology Laboratory.

### RECENT PUBLICATIONS

- Bergold, G. H. and Haney, G.R. Low background gas flow-counter. *J. Sci. Instrum.* 36: 39-44. 1959.
- Blais, J. R. The vulnerability of balsam fir to spruce budworm attack in northwestern Ontario, with special reference to the physiological age of the tree. *For. Chron.* 34: 405-422. 1958.
- Edwards, D. K. A photographic method for recording activity and behaviour in a group of small animals. *Nature* 183: 625-626. 1959.
- Kinghorn, J. M. and Chapman, J. A. The overwintering of the ambrosia beetle *Trypodendron lineatum* (Oliv.). *For. Sci.* 5: 81-92. 1959.
- Kushner, D. J. and Feldman, D. Characterization of the bacterial enzyme "thromboplastinase". *Biochim. Biophys. Acta* 30: 466-475. 1958.
- Redmond, D. R. Mortality of rootlets in balsam fir defoliated by the spruce budworm. *For. Sci.* 5: 64-69. 1959.
- Silver, G. T. A method for sampling eggs of the black-headed budworm. *J. For.* 57: 203-205. 1959.
- Thomas, J. B. Mortality of white spruce in the Lake Nipigon region of Ontario. *For. Chron.* 34: 393-404. 1958.

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O. H. M. S.



Fl.

D. C. ELDI,  
FOREST BIOLOGY LABORATORY,  
COLLEGE HILL,  
FREDERICTON, N.B.

RESEARCH BRANCH  
DEPARTMENT OF AGRICULTURE  
OTTAWA