

II.—LIBERATIONS OF SPRUCE SAW-FLY PARASITES, BY PROVINCES, 1933-38.¹

Province.	Number.
New Brunswick.....	98,673,428
Nova Scotia.....	1,981,207
Ontario.....	6,696,881
Quebec.....	134,851,037
Total.....	242,202,553

¹ These figures were supplied by the Belleville Laboratory.

Of this total, 241,009,757 individuals belonged to a single species, *Microplectron fuscipennis*. This parasite and a species of *Exenterus* have succeeded in establishing themselves in Canada and have distinct possibilities of becoming a significant factor in control. Two other species also show promise of becoming established. In all, some 23 species have been tested to date and, although many of them have not yet been recovered in the field since the day of their liberation, this should not be interpreted too readily as being a sign of absolute failure.

The extensive use of insect parasites in the control of introduced pests constitutes in itself an argument for further investigation of similar practices in dealing with certain native species. Several lines of endeavour are more or less clearly indicated. Among others are: the study of the effect of species already introduced; new introductions for specific purposes, especially when it appears that native parasites are not adequate; and also more intensive studies of our native parasitic fauna and of methods by which its present effectiveness might be increased. Some steps have already been taken in this direction and it may be reasonably expected that, in years to come, this phase of biological control will become increasingly important in the field of applied entomology.

CONTROL OF IMPORTATION.—The realization that "an ounce of prevention is better than a pound of cure" is of particular value in dealing with foreign pests. For this reason, the Plant Protection Division of the Department of Agriculture exercises continual, unrelenting vigilance over the importation of plants and plant products from other countries. The function of this Division is well summarized in Regulation 1 of the Destructive Insect and Pest Act —

All trees imported are subject to the requirement of a permit issued by the Secretary of the Destructive Insect and Pest Act Advisory Board. The importations must enter through one of several ports of importation established in Canada, and in addition to being accompanied by a certificate of inspection from the country of origin, are subject to reinspection on arrival in Canada either at the port of importation or after delivery to the premises of the importer. No importations may be released from customs without authority under the above Act involving an inspection or clearance certificate issued in Canada, in addition to the permit.

Special regulations are drafted whenever new emergencies arise and are so designed as to ensure as complete protection as is humanly possible against the introduction of dangerous insects and diseases into Canada. Several important interceptions of forest pests have been made from time to time under these regulations.

SALVAGE OF AFFECTED TIMBER.—Finally, no account of activities in forest entomology would be complete without a word about salvage. No matter how efficient the organization for combating forest insects may become, it will always be