

## A RECORD OF *RHAGOLETIS INDIFFERENS* CURRAN FROM CRESTON, BRITISH COLUMBIA

J. C. ARRAND AND W. S. PETERS

In 1962 *Rhagoletis indifferens* Curran was identified from collections in cherry orchards at Creston. Identification was confirmed by J. F. McAlpine, Canada Department of Agriculture, Research Branch, Ottawa. Previously only *Rhagoletis fausta* (Osten Sacken), had been recorded from the Kootenay area of British Columbia. The presence of *R. indifferens* has greatly increased the problem of fruit fly control in that area.

Although this is the first record of *R. indifferens* in Canada, the *R. cingulata* that have been reported from

the Fraser Valley and Vancouver Island were undoubtedly *R. indifferens*. Specimens from both locations which have been examined fit the description of *R. indifferens*.

According to G. L. Bush (1966), *R. cingulata* is not found west of Iowa in North America. Although the range of *R. indifferens* is largely within the range of the main wild host, bitter cherry, *Prunus emarginata*, it is present in the commercial cherry area of Western Montana beyond the range of bitter cherry.

### References

- Bush, G. L. 1966. "The Taxonomy, Cytology and Evolution of the Genus *Rhagoletis* in North America (Diptera Tephritidae), Bulletin of the Museum of Comparative Zoology, Vol. 134, No. 11—Harvard University Press.

## THE WORLD OF AN INSECT

By REMY CHAUVIN

World University Library, McGraw-Hill Book Co. New York and Toronto. 1967. Pp. 254. \$2.45.

But \$2.75 at the UBC Bookstore, a high price for a paperback that is not really a teaching or reference text. Without question Prof. Chauvin is a first rate entomologist and certainly a great teacher. The flyleaf says the book was written for university students, the title suggests for laymen. But numerous unexplained scientific names and jargon terms would discourage laymen. The book needs a glossary and list of insects and plants mentioned. The lack of a proper bibliography is a very serious omission. True, there are 122 references chosen for their general application and for further reading, but these may or may not be referred to. For most of the citations in the text, often without dates, the reader is invited to go to the Zoological Record, Review of Applied Entomol-

ogy, Biological Abstracts, etc. In a book of this size it seems shortsighted to begrudge four or five pages for references. In the first that interested me which I tried to trace, the senior author's name turned out to be not just misspelled but wrong, and it took a professional librarian some time to verify this. Perhaps the intention is to give students practice in searching literature. In general, the book is not explicit enough for an undergraduate text and contains simply too many errors. Thus on p. 203: Sheals (1955) used DDT "at 75-80% of the gamma isomer . . . the only active part in the commercial product." The date was 1956 and the isomer was *p,p'*. In a short reference to Balachowsky (p. 241) on biological control, six misstatements or outright errors occur within nine lines. In quotation from Balachowsky (p. 226) we read of the fruit-growing valley of Yatima, Washington. There are others.

The author has been ill-served by

his translator and proof readers. Harold Oldroyd is a competent translator but a neglectful rewriter subject to unforgivable lapses into literal translation such as: "... for the beetles the most abundant and most frequent ..." (p. 138); or "... have been equally detected by ..." (p. 108); alfalfa is nearly always referred to as the field of alfalfa, e.g. "... the field of alfalfa is a perennial crop." The proofreading is inexact, leaving too many misspellings even of names, and a pair of transposed captions for full-page pictures.

Physically the book is attractive despite an infuriating tendency to close itself. The paper and type are good, the numerous photographs are well chosen and the line drawings are simple, very clear, and improved by judicious use of green ink. The same applies to the graphs, which are mostly re-drawn and re-lettered, simplified, and occasionally over-simplified. The 15 tables are well worked-over, but at least one is reduced beyond the point of clarity, by the omission of units (p. 147).

Canadian entomologists come off well. The work of Morris, Wellington, Watt, Turnbull, and Stanley is discussed at some length and with approval amounting to enthusiasm.

Wellington, Watt, and Beirne appear in the bibliography. French entomologists fare even better, almost to the point of chauvinism (no pun intended). They are said to be distinct from Americans, who are preoccupied with overpopulation, tending to rear large populations of grain insects then applying statistics without asking whether the biology of two *Tribolium* differs from that of a singleton (p. 85). French workers reject "... the soft pillow of simple, mechanical factors upon which certain research workers take it easy." (p. 86). In the bibliography only 14 of 122 titles are in French, 16 are in German, and 40 appeared in U.S. publications. Chapter 4, Populations in Nature, is largely based on German studies in cultivated field crops.

Chauvin is loquacious but not unduly so and the book moves, albeit slowly. It adds up to a usable and, in spite of my complaints, a curiously enjoyable book. For all its shortcomings I should recommend it strongly for graduate students, who could not help but be stimulated. But as a teaching and reference text it cannot compete with Southwood's Ecological Methods.

—H. R. MacCarthy

#### METRIC CONVERSION

Contributors of papers on laboratory studies should use the metric system exclusively. Use of the metric system in reporting the results of field studies is a desirable ultimate objective. Since it is difficult to replace immediately such standard concepts as lb/acre by the unit kg/hectare, yards by meters, or miles by kilometers, the following table of conversion factors is presented.

1 in.=2.54 cm	1 ft <sup>3</sup> =28.3 dm <sup>3</sup>	1 cm=0.394 in
1 yard=0.914 m	1 acre=0.405 hectares	1 m=3.28 ft=1.094 yards
1 mile=1.61 km	1 lb/acre=1.12 kg/hectare	1 km=0.621 mile
1 lb.=453.6 g	1 lb/in <sup>2</sup> (psi)=70.3 g/cm <sup>2</sup>	1 kg=2.2 lb
1 gal (U.S.)=3.785 liters	1 lb/gal (U.S.)=120 g/liter	1 liter=0.264 gal (U.S.)
1 gal (Imp)=4.546 liters	1 lb/gal (Imp)=100 g/liter	1 liter=0.220 (Imp)
	1 dm <sup>3</sup> =0.0353 ft <sup>3</sup>	
	1 hectare=2.47 acres	
	1 kg/hectare=0.89 lb/acre	
	1 g/m <sup>2</sup> =0.0142 psi	
	1 g/liter=0.83 lb/100 gal (U.S.)	
	=1000 ppm	
	1 g/liter=1 lb/100 gal (Imp)	