

The bibliography lists 747 titles, the most recent of which were published in 1974. Although incomplete it will serve as a valuable introduction to the literature of virus-insect relationships.

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The Use of Aircraft in Agriculture, by Norman B. Akesson and Wesley E. Yates. FAO Agriculture Series No. 2, FAO Agricultural Development Paper No. 94. Published by the Food and Agriculture Organization of the United Nations, Rome, Italy (available in the United States from Unipub, New York, N. Y.) 1974 (2nd printing with corrections 1976). 217 pp., 81 illustrations, 25 appendix tables. \$6.50.

The book opens with a rather detailed discussion of the origin, development, and growth of aerial application and ends with a rather brief discussion of a few specific treatment practices. In between, major emphasis, and rightly so, has been placed on application equipment (including aircraft types), particle behavior, operational analysis and flight planning; although government regulation, meteorological factors, collection and analysis of liquid and solid particles, and flight safety and training are discussed in some detail. Although written primarily from an agricultural point of view, some consideration is also given to the application techniques and droplet size used in adult vector control.

The authors' expertise in the fields of aircraft dispersal equipment and the physics and techniques of particle behavior as they relate to swath and drift are reflected in the detailed discussion of these subjects. As a result, considerable space is devoted to the choice of dispersal equipment with a detailed discussion of the various types of pumps, power sources, and atomizers for liquid dispersal and various types of spreaders for dry material dispersal as well as

an in depth discussion of the physics and control of particle and droplet behavior and its roll in effective insect control. The book, therefore, is obviously written for the research or commercial applicator who desires to increase his knowledge or expertise in the field since it lacks the "cook book" methods necessary for the novice.

Although written in the United States, the authors endeavor to project an international usefulness. In most cases, a dual system of metric and English (U.S.A.) equivalents are used throughout the text and discussions on available commercial aircraft, operational analyses and safety deal with international statistics.

There are many excellent illustrations, diagrams and graphs that add to the usefulness of the book, although in many instances their location is far removed from the applicable text and some of those included are of questionable descriptive value.

The 34 pages of appendix tables contain much useful information, including tables of aircraft specifications and operational cost analyses, spray nozzle flow rates and droplet data, physical properties of diluents, speed-swath-acre calculations, insecticide toxicity and conversion tables for metric to U.S. weights and measures.

The book contains no index although there is a detailed table of contents and lists of illustrations and appendix tables. Ample bibliographical references are also provided for those who desire further explanation of a particular subject.

Although not for the layman, this publication offers a comprehensive review of a very technical subject and should be a valuable addition to the libraries of agricultural engineers, aerial applicators, research entomologists and agronomists alike.

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