

BRIEF ARTICLE

MYCIDIPOLOSIS (DIPTERA, CECIDOMYIIDAE)
FEEDING ON CLOVER RUST
(UROMYCES TRIFOLII) SPORESB. Berkenkamp¹

During forage crop disease surveys, rust caused by *Uromyces trifolii* (Hedw. f. ex. DC.) Léév. was occasionally found on alsike clover (*Trifolium hybridum* L.), red clover (*T. pratense* L.), and white clover (*T. repens* L.). Small dipterous larvae were regularly found feeding on uredospores on rusted plants, usually on the lower surface of the leaves and occasionally on infested petioles and stems. Rust and associated larvae were found between July 7 and September 6 each year 1964 through 1968 in various areas throughout central and northern Alberta.

Larvae were collected and reared on rust-infected greenhouse plants, or detached leaves in the laboratory. In the field the larvae migrated downward to pupate and probably pupate in the soil. Since larvae of unknown ages were collected, the time required for completion of the life cycle was not established. Eggs, pupae and adults were not seen in the field, and the pupae and adults described were reared from larvae. The larvae were 1.80 x .39 mm, had fourteen segments, and were bright orange in color. Pupae measured 1.60 x 0.48 mm, and adults were 1.45 mm long with legs up to 2.28 mm long.

Larvae and adults were identified as *Mycodiplosis impatientis* Felt (Cecidomyiidae) by Raymond J. Gagné of the Systematic Entomology Laboratory, U. S. Department of Agriculture, National Museum, Washington, D. C. This species was originally reared and described from *Aecidium impatientis* on stems of touch-me-not (*Impatiens*) (1).

Literature cited

1. Felt, E.P. 1908. Studies in Cecidomyiidae II, p. 307-422. In 23rd Report of the state entomologist 1907. New York State Mus. Bull. 124.

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BOOK REVIEW

PLANT PATHOLOGIST'S POCKETBOOK

Commonwealth Mycological Institute (Compiler). Commonwealth Mycological Institute, Kew, Surrey, England. iv + 267 p. 1968. Price 30 shillings or Can. \$3.90.

Dr. G. C. Ainsworth, Director of the C. M. I., remarked in the preface to this book that the contributions made to it by the staff of that institution, and by outside specialists, were planned to fill a need for a wide-ranging reference miscellany for plant pathologists. In such a wide conspectus of plant pathology, it is not surprising that full justice could not be done to many of the topics. The selection of these and the emphasis placed on each have clearly been the compilers' dilemma.

The contents, under 19 main headings, range from fungus diseases, plant quarantine, plant pathogenic nematodes, and weeds, to presentation of results. The index is adequate since the contents table is sufficiently detailed. There are excellent sections on methods and techniques, and formulae (with most of the standard and a few novel prescriptions and "wrinkles"), which will probably be used more than most of the other information. The section on some common plant diseases is least regarded by this reviewer since there is only a passing reference to diseases of grasses, but then it may be of considerable interest to those pathologists whose interests are less parochial. The tables in this section waste a considerable amount of valuable space and a running account of the more important diseases of major crops would have sufficed. This space would have been profitably employed in expanding lists and references to diseases by region and crop, select bibliographies to each section, and addresses of organizations. Plant pathologists with their major training in mycology in the majority should welcome the sections on bacteria, viruses, nematodes, and insects, since they suggest how to handle and describe these often unfamiliar pathogens. The introductions to these and other sections are very readable and succinctly bring one up-to-date. This is a very useful handbook (it is hardly a pocket book) for the individual plant pathologist, especially when working away from a good library. Very few serious slips or printing errors were found.

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