

ENTOMOLOGY

Chairman: F. N. YOUNG, Indiana University

M. CURTIS WILSON, Purdue University, was elected chairman for 1953

ABSTRACTS

Some little known habits of the insects which "catface" peaches. G. EDWARD MARSHALL, Purdue University Agricultural Experiment Station, Orleans, Indiana.—Field studies in 1952 indicate that there is little cessation in the rate of attack by the Pentatomid bugs which "catface" peaches from the time they start feeding during the balloon stage of the blossom in the spring until harvest. Physical changes in the peach fruit itself occur in stages, from the time the ovule is fertilized until harvest. These changes have obscured and complicated the identification of injury to peaches by Pentatomids. To facilitate an understanding of the condition of the fruit and what takes place during bug attacks as the season advances five stages of the peach fruit have been designated as the season progresses: (1) Dehiscence, (2) Fuzz removal, (3) Wax pedicel, (4) Brown spot, (5) Fruit ripe.

Control of the cabbage maggot, *Hylemya brassicae* (Bouche). GEORGE E. GOULD, Purdue University.—The cabbage maggot, the larval stage of the fly *Hylemya brassicae* (Bouche), is a serious pest on all crops of the family Cruciferae. The larvae feed on and often destroy the roots of cabbage, cauliflower and kale and in addition tunnel on the surface of turnips and radishes. Damage was especially severe in 1951 and 1952 with losses as high as 50 to 75 per cent of the crop. Heaviest losses occurred on those crops grown in the spring and fall in those areas where extensive acreages of vegetable crops were grown. Commercial vegetable growers of Marion and Lake counties have suffered the greatest losses, while some damage in home gardens has been reported from all parts of the state.

Several of the new insecticides have shown promise in the replacement of the corrosive sublimate method of drenching the plant roots. The more promising of the new materials include chlordane, aldrin, and Heptachlor. Several methods of applying these materials have been tested and the following gave good to excellent results on cabbage: dipping roots in emulsion before transplanting, dusting roots before transplanting, using insecticides in transplant water, drenching soil around newly set plants, and dusting or spraying newly set plants three times at weekly intervals. The dip method was found to be the simplest, as here the grower can pull his plants, dip the roots in the emulsion and set in the field. It was noted that dipped plants were slower in starting to grow, but after two months were larger and had more mature heads than the untreated plants. Many commercial growers in the vicinity of Indianapolis have used the dip method with chlordane as the insecticide and have had over 98 per cent of their plants maggot-free.

Results on tests to control this same maggot on turnips and radishes have not been satisfactory. Soil treatments and insecticides in the row before planting had little effect on subsequent maggot populations, while dust and spray applications to young plants gave only temporary protection. Indianapolis growers of fall turnips have avoided serious losses by planting in fields several miles away from the commercial gardening area.

Notes on the distribution and habitat of *Agabus confusus* (Blatchley). (Coleoptera: Dytiscidae). DORIS R. KLINE, Indiana University.—*Agabus confusus*, described from a single specimen as *Rhantus confusus* by W. S. Blatchley, is relatively rare in collections, and nothing seems to be known concerning its habits or habitat. The species has been found in Monroe and Brown counties, Indiana and in Jefferson County, Kentucky. Adults were found in association with small, intermittent streams in both limestone and sandstone regions. They were rarely seen in water, but were found in moist situations under rocks in nearly dry stream beds or near pools left when the streams dried up. All streams along which the beetles were found are in wooded areas and show little silting and no aquatic vegetation or decomposed organic matter. No larvae have been found to date. Observations on specimens in aquaria indicate that they may be more active at night.

Differential selection of mating and oviposition sites in *Perithemis tenera* Say, classed according to degree of wing pigmentation (Odonata). MERLE E. JACOBS, Indiana University.—The selection of mating and oviposition sites in males and females of the highly polymorphic species, *Perithemis tenera* Say, was studied in the field by means of individually marked specimens. Individuals observed repeatedly showed a high degree of constancy in regard to whether they selected floating wood or mats of vegetation as mating and oviposition sites. Of 653 females divided into eight classes according to the degree of wing pigmentation, the percentage of each class ovipositing on floating or projecting wood, sticks, or logs was as follows:

1 (lightest)	2	3	4	5	6	7	8 (darkest)
33%	35%	38%	51%	62%	58%	69%	100%

Of 460 males divided into three classes, the percentage of each class selecting mating sites on or about floating or projecting wood, sticks, or logs was as follows:

1 (lightest)	2	3 (darkest)
32%	39%	71%