PERISTENUS HENRYI (HYMENOPTERA: BRACONIDAE, EUPHORINAE), A NEW SPECIES PARASITIC ON THE HONEYLOCUST PLANT BUG, DIAPHNOCORIS CHLORIONIS (HEMIPTERA: MIRIDAE)

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Abstract.—The euphorine braconid Peristenus henryi Loan, a parasite of the plant bug Diaphnocoris chlorionis (Say), is described as a new species from Pennsylvania and compared with P. reidi Loan. Notes are given on parasite biology and on parasitism of honeylocust plant bug populations. The euphorine Leiophron maculipennis (Ashmead), also reared from D. chlorionis in Pennsylvania, is listed as a new state record.

The honeylocust plant bug, *Diaphnocoris chlorionis* (Say), is a univoltine, orthotyline mirid restricted to honeylocust, *Gleditsia triacanthos* L. Wheeler and Henry (1976) studied its life history in ornamental plantings and nurseries in southcentral Pennsylvania. Eggs overwinter in 2- or 3-year-old stems. Their hatch the following spring is well synchronized with leaf flush of host trees, beginning from early to late April in Pennsylvania. Nymphal development requires 4–5 weeks, with adults appearing as early as the second week of May. Peak numbers of adults occur from late May to early June; they usually die off by late June or early July. Plant bug feeding produces severe discoloration and distortion of leaflets, premature leaf fall and, in heavy infestations, defoliation.

Wheeler and Henry (1976) reported large populations of the honeylocust plant bug during 1975–76 (as many as 2500 nymphs and adults on the terminal 36 cm of 4 branches on each of 2 trees). Parasitism was not mentioned in the paper, although a euphorine braconid found parasitizing nymphs of *D. chlorionis* in 1976 appeared responsible for the population crash observed the following year (Wheeler and Henry, unpublished data). Until recently, problems in breaking diapause precluded the rearing and identification of the parasite,.

The braconid was not identified until reared specimens were submitted to CCL, who found that the series contained not only *Leiophron maculipennis* (Ashmead), the only euphorine previously known to parasitize *D. chlorionis* (Loan 1974, 1980) but also an undescribed species of the related genus *Peristenus* Foerster. The new species, *P. henryi*, is described and illustrated here, and notes are given on its biology.