Ashmead described this species from a male collected in Florida, probably near Jacksonville.

The specimens of *O. floridana* mentioned in this paper are deposited in the Florida State Collection of Arthropods, Gainesville, Florida. The authors appreciate the constructive comments of John Heraty and Drs. John Sivinski, Fred Santana, and Clifford Lofgren. Marie Benoit kindly typed several early drafts.

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PARASITOIDS ASSOCIATED WITH THE IMMATURE STAGES OF *SELENISA SUEROIDES* (LEPIDOPTERA: NOCTUIDAE)

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Larvae of *Selenisa sueroides* (Guenée) damage fabaceous host-plants by defoliating them, (Genung & Allen 1962, Bullock & Kretschmer 1982) or by boring into stems to pupate (Skinner 1918, Genung & Green 1965). In cases where host-plant stems are unsuitable for use as pupation sites, mature larvae leave the host and seek alternative sites. Within citrus groves in south Florida, these sites include desiccated weed stems, citrus trunk wraps composed of expanded or extruded polystyrene, and subcanopy irrigation tubing (Brushwein & Childers 1989, Brushwein et al. 1989).

In October 1987, prepupae and pupae of *S. sueroides* were collected from desiccated weed stems and trunk wraps in a citrus grove in Hendry Co., Fla. This grove had sustained boring damage to the subcanopy irrigation tubing caused by fifth instar *S. sueroides* caterpillars. Stems were transported to the laboratory, split longitudinally, and prepupae and pupae removed. Similarly, prepupae and pupae were recovered from four citrus trunk wraps (Reese Clip-on® Citrus Insulator). Three larval cadavers, each bearing numerous parasitoid cocoons, were collected from stems of the larval host-plant, American jointvetch (*Aeschynomene americana* L.), that grew in drainage ditches adjacent to the damaged irrigation components. Prepupae, pupae, and parasitized larvae were held individually under ambient conditions in capped, 29.5 ml capacity plastic cups.

Five species of parasitoids, four of which represent new host records, were reared from immature *S. sueroides* (Table 1). Parasitism rates for each species were not recorded. Larvae were attacked and killed by a gregarious eulophid parasitoid, *Euplec-*

TABLE 1. PARASITOIDS ASSOCIATED WITH *S. SUEROIDES* IMMATURES COLLECTED IN HENDRY CO., FLORIDA, 1987.

Parasitoid ORDER Family Species	Host stage parasitized (No. collected)	No. parasitoids reared		
		Male	Female	Undet.
HYMENOPTERA				
Chalcididae				
Brachymeria ovata[a]	pupa	2	4	
	}(21)			}7[b]
B. robusta[a]	pupa	4		
Eulophidae				
Euplectrus comstockii	larva (3)	22	30	0
Ichneumonidae				
Gambrus ultimus[a]	prepupa (8)	1	6	1[b]
	pupa (2)	1	1	0
DIPTERA				
Tachinidae				
Chetogena sp.[a]	larva (10)	–[c]	–[c]	2[b], 8[d]

[a]New parasitoid record for *S. sueroides*.
[b]Parasitoid death due to desiccation or disease during larval stage.
[c]Sex determination not attempted.
[d]One specimen hyperparasitized by a male *B. robusta*.

trus comstockii Howard. Two *S. sueroides* produced 22 and 7 adult *E. comstockii*, with each parasitoid group having similar male:female sex ratios of 1:6.3 and 1:6.0, respectively. Twenty-three *E. comstockii* developed on the third larva, but the male:female sex ratio was reversed, equaling 3.6:1.0. Bullock & Kretschmer (1982) reported the only other case of *S. sueroides* parasitism. Larvae that infested plots of American jointvetch also were parasitized by *E. comstockii.*

A tachinid, *Chetogena* sp., also attacked *S. sueroides* larvae, but killed the host during the prepupal (60%) and pupal (40%) stages, n = 10. This finding differs from that reported by Hall (1985) where *Chetogena* sp. was frequently recovered from prepupae but only occasionally from pupae of grassloopers, *Mocis latipes* (Guenée) [Noctuidae].

Prepupae and pupae of *S. sueroides* were parasitized by an ichneumonid, *Gambrus ultimus* (Cresson). This species killed the host predominately during the prepupal stage (Table 1). In 9 of 10 recoveries the mature *G. ultimus* larva exited the host and spun an elongate silken cocoon adjacent to the host's shrivelled cadaver. In one instance, however, *G. ultimus* completed development within the host pupa without first spinning a cocoon. Other reports indicate that *G. ultimus* usually parasitizes the pupal stage of lepidopteran hosts. Cassani (1985) reared this parasitoid only from *Simyra henrici* (Grote) [Noctuidae] pupae; similarly, Hall (1985) also recovered *G. ultimus* only from pupae of field-collected grassloopers.

Two chalcidid parasitoids, *Brachymeria ovata* (Say) and *Brachymeria robusta* (Cresson), attacked *S. sueroides* pupae. Male parasitoids of both species emerged only from male host pupae (n = 6). Likewise, female *B. robusta* emerged only from female hosts (n = 4), whereas, *B. ovata* females developed in male (n = 3) and female (n = 1) pupae. A single case of hyperparasitism occurred in which a male *B. robusta* emerged from a *Chetogena* sp. puparium.

Parasitoid specimens were identified by E. E. Grissell, M. E. Schauff, N. E. Woodley (Systematic Entomology Laboratory, Agricultural Research Service, USDA,

Beltsville, MD) and C. C. Porter (Florida State Collection of Arthropods [FSCA], Gainesville, FL). Voucher specimens of adult parasitoids were deposited in the FSCA. Florida Agricultural Experiment Stations Journal Series No. R-00482.

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EFFECT OF INSECTICIDES, PREDATION, AND PRECIPITATION ON POPULATIONS OF *THRIPS PALMI* ON AUBERGINE (EGGPLANT) IN GUADELOUPE

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Aubergine (eggplant) in Guadeloupe has been attacked by *Thrips palmi* Karny since November 1985 (Bournier 1986). In 1986 the damage resulted in a reduction of the aubergine crop from 5,000 tons each year to 1,600 tons (Manyri 1986).

Profenofos O-(4-bromo-2-chlorophenyl)-O-ethyl S-propyl phosphorothioate] was reported to be an effective control agent in 1986 (Hostachy et al. 1986a, b); however, field studies in 1987 indicated thrips populations in profenophos-treated plots as great as in control plots. Therefore, we initiated the following study during the normal growing season to determine some of the factors influencing thrips populations in aubergine.

Three plots of 200 m^2 were established. Each contained 8 rows, 40 plants per row, 20 m long with 1 m between rows. The plots were separated by 50 m. Fertilization and drip irrigation were the same in all plots. The plants were set at the beginning of August, 1987, flowering began one month later and harvest began about 45 days after planting. Insecticide treatments began on 17 August and were terminated on 14 November. One plot served as an untreated check, the second received profenophos