NOTES ON A PARASITE OF THE CITRUS ROOT WEEVIL,
*Pachnaeus litus* (Germ.)

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The citrus root weevil, *Pachnaeus litus* (Germ.), is not considered a major pest of citrus in Florida but occasionally causes serious damage, particularly along the lower east coast. The adult weevils feed on the foliage, the injury typically appearing as notches along the leaf margin. The larvae cause much more serious injury by feeding on the root cortex, usually on the underside of the roots but where high populations are present complete girdling often occurs.

During the course of investigations on the citrus root weevil in 1957, several egg masses were collected and brought to the laboratory to obtain a supply of newly hatched larvae to infest potted trees. A trichogrammatid wasp emerged from a high percentage of the eggs. Specimens were sent to Dr. P. W. Oman of the Insect Identification and Parasite Introduction Research Branch, U. S. D. A., and subsequently they were identified by Dr. B. D. Burks as *Ufens osborni* Dozier. According to Dr. Oman’s report *(in litt., May 21, 1959)* this species has not been known previously from the United States.

Dozier (1932)\(^1\) described *U. osborni* from a series of specimens reared by H. T. Osborn at Central Agu erre, Puerto Rico, from eggs of the sugar cane root weevil, *Diaprepes abbreviatus* L.

From a series of egg masses obtained during May and June, 1957, less than 2% of the weevil larvae hatched out of the 623 eggs. Adult *U. osborni* emerged from 81% of the eggs. During the month of September, 11 additional egg masses were collected. Of these, 2 masses were not parasitized, 8 produced parasites only, and 1 yielded an equal number of citrus root weevil larvae and parasites.

The appearance of citrus root weevil populations has always been sporadic, adults appearing in a grove one year and disappearing the next. Occasional adults have been collected since 1957, but no egg masses have been seen. This is not to infer that they are not present, but that the citrus root weevil population has remained at a very low level.

It is tempting to speculate that the conditions during 1957 were such that parasitization by *U. osborni* reduced the citrus root weevil population to such an extent that it has not been able to build up again to significant numbers. It is hoped that the effectiveness of this parasite as a biological control agent can be fully evaluated in the future.

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