

FIELD PARASITIZATION OF HOUSE FLIES BY NATURAL POPULATIONS OF *PACHYCREPOIDEUS VINDEMIAE* (RONDANI), *MUSCIDIFURAX RAPTOR* GIRAULT AND SANDERS, AND *SPALANGIA NIGROAENEA* CURTIS—(*Note*). A preliminary survey of a field population of house flies, *Musca domestica* L., on a small swine farm in Alachua County, Florida, indicated the presence of protelean parasites. Therefore, beginning 22 Aug. 1974, samples of house fly pupae were collected 3 times a week from the breeding areas until 6 Oct. 1974. The cultured pupae were held at the laboratory for 10 days at 27.8°C and 60% RH to allow for emergence of the house flies or of parasites that completed development. The remaining uneclosed pupae were dissected and examined microscopically for immature parasites.

Adult house flies emerged from 25% of the pupae collected. Parasites emerged from 17%. The other 58% died from other causes or natural mortality. Of the pupal parasites collected, 20% were Pachycrepoideus vindemiae (Rondani), 55% were Muscidifurax raptor Girault and Sanders, and 25% were Spalangia nigroaenea Curtis. This is the first report of S. nigroaenea in Florida. The authors wish to thank A. Benton of this laboratory for technical assistance and E. E. Grissel of the Florida Department of Agriculture and Consumer Services, Division of Plant Industry, P. O. Box 1269, Gainesville, Florida 32602 for identifying the parasites. Philip B. Morgan and R. S. Patterson, Insects Affecting Man Research Laboratory, Agr. Res. Serv., USDA, Gainesville, Florida 32604.



NEODIPRION MERKELI ROSS (HYMENOPTERA: DIPRIONIDAE) IN THE BAHAMAS.—(Note). Egg scars, early instar larvae, and exuviae of a mature larva of a Neodiprion sp. were collected from Pinus caribea Morelet on New Providence Island, Bahamas, 12 Sept. 1974. The head capsule (2-tone) of the exuviae and the oviposition pattern (row-type with basal resin pocket on flat side of needle) are identical to that described for N. merkeli Ross (Wilkinson 1971, Ann. Ent. Soc. Amer. 64:241-247); thus, these specimens may represent a colony of N. merkeli in the Bahamas. This is the first record of a diprionid species from the Bahamas, and the second species from the West Indies (the other being N. insularis (Cresson) from Cuba) (Smith 1974, Proc. Ent. Soc. Washington 76:409-418). The specimens are in the collection of the author. H. N. Greenbaum, Univ. of Florida, Gainesville, 32611. Present address: Dept. of Entomology, Univ. of Arkansas, Fayetteville, 72701.