

# RECORD OF *NEODIPRION WARRENI* (HYMENOPTERA:DIPRIONIDAE) IN FLORIDA<sup>1</sup>

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## ABSTRACT

*Neodiprion warreni* Ross feeding larvae were collected during October 1964 in north-central peninsular Florida from spruce pine, *Pinus glabra* Walt., a new host and location in the southeastern U. S. Concurrent infestations of spruce pine by *Neodiprion excitans* Rohwer support the speculation of H. H. Ross that *Neodiprion merkei* Ross might be of hybrid origin, resulting from the cross (*warreni* x *excitans*).

Females of *Neodiprion warreni* Ross were reared from endemic populations of feeding larvae collected 23 October 1964 from spruce pine, *Pinus glabra* Walt., near Worthington Springs, Union County, in north-central peninsular Florida<sup>2</sup>. This sawfly was reported previously only from Union County, Arkansas, where larvae defoliated shortleaf pine, *Pinus echinata* Mill., during October-November 1957 (Warren 1958, Ross 1961). Warren (personal communication 1966-67) estimated 45,000 acres in Arkansas and an unknown acreage in Louisiana were infested during 1957; the sawfly apparently had not been observed prior to this outbreak and was not detected afterwards. Larvae over-wintered in cocoons spun in the soil, and females contained a mean of 87 light blue-green eggs. Other biological information has not been published.

*Neodiprion merkei* and *N. warreni* were described by Ross (1961), who noted that while the female saw in *merkei* was similar to that in *warreni* of the *virginianus* complex, the saw sheath in *merkei* was similar to that in *Neodiprion excitans* Rohwer of the *pini-rigidae* complex. This unique combination of characters in *merkei* does not fit the principal existing key to *Neodiprion* sawflies by Ross (1955), and Ross (1961) speculated that *merkei* might be of hybrid origin (e.g., *warreni* x *excitans*). No apparent geographical, host, or temporal barrier to this cross exists, since *excitans* (like *warreni*) occurs on spruce pine in the same area of Florida during the fall (Deneve 1968, Wilkinson unpublished).

## LITERATURE CITED

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- Warren, L. O. 1958. Pine sawflies in Arkansas. Ark. Farm Res. (Jan.-Feb.):8.

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<sup>2</sup>*N. warreni* larvae were collected by R. J. Varnell and reared by E. P. Merkel, Southeastern Forest Experiment Station, Olustee, Florida. Identification by the author was confirmed by Dr. D. R. Smith of the U. S. National Museum, where females and mature feeding larvae were deposited.