

Oceanaspidiotus araucariae (Adachi and Fullaway)

(HOMOPTERA: COCCOIDEA: DIASPIDIDAE)¹

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SYNONYMY: Octaspidiotus araucariae Adachi and Fullaway, 1953.
Oceanaspidiotus araucariae: Takagi, 1984.

INTRODUCTION: This armored scale insect has been introduced recently into Florida from Hawaii. The shipment of host plants consisted of 12,500 Araucaria heterophylla (Salisb.) Franco (=A. excelsa), Norfolk Island pine, and apparently 5,000 of these plants have been distributed in commerce. Control procedures are underway in an attempt to eliminate this insect from Florida.

DESCRIPTION: The female armor (fig. 1) is pale yellow to white, somewhat circular, 1.0 mm by 0.8 mm with the exuviae slightly off-center (Adachi and Fullaway, 1953). The male armor (fig. 2) is very similar to the female in color, but is more elongate with the exuviae nearly central. The female body with the armor removed (fig. 3) is slightly longer than wide.

The pygidium has 4 pairs of lobes with the median lobes notched on each side. Second lobes are variable in shape, and the 3rd and 4th lobes are small points. Plates are well developed and extend beyond the lobes. Dorsal macroducts are few, and no macroduct occurs between the median lobes. Five to ten lateral macroducts occur on abdominal segments 2 and 3.

SURVEY AND DETECTION:

1. Scales may be found throughout the year.
2. Inspect for dying, brown, or chlorotic twigs (fig. 4) of Norfolk Island pines. Scales are found on needles and stems.
3. Submit mature adult female specimens, on the host, in a plastic bag.

DISTRIBUTION: This scale was originally described from Oahu, Hawaii (Adachi and Fullaway, 1953). Beardsley (1966) reported it from New Caledonia and Caroline Islands. Nakahara (1981) reported it from other Hawaiian Islands: Maui and Molokai. Nakahara and Miller (1981) recorded this scale from Puerto Rico.

HOSTS: This scale insect is known only from Araucaria heterophylla (=A. excelsa), Norfolk Island pine.

ECONOMIC IMPORTANCE: No studies have been conducted on the economic importance; however, it is apparent from infested seedlings in Florida that a considerable amount of damage can occur.

CONTROL: Systemic insecticides are being used in an attempt to eliminate known infestations in Florida.

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LITERATURE CITED:

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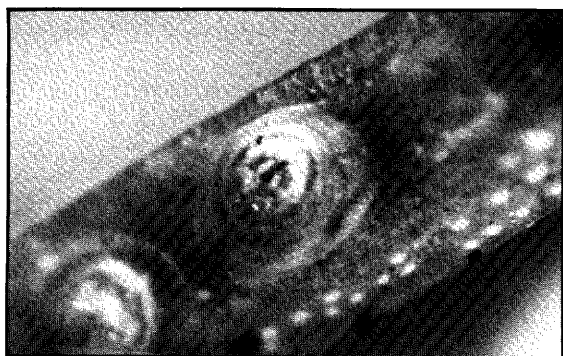


Fig. 1. Oceanaspidiotus araucariae, adult female armor, 30X. (DPI Photo by J. W. Lotz #850056-B-2)

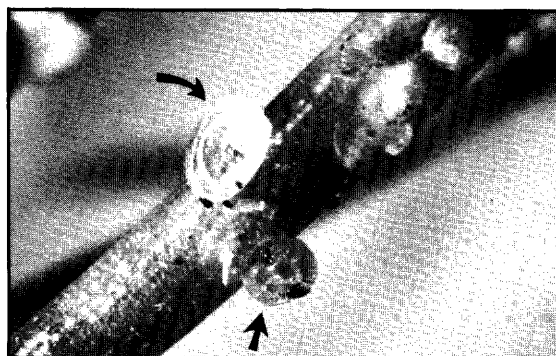


Fig. 3. Oceanaspidiotus araucariae, adult female with armor removed (straight arrow), underside of armor (curved arrow), 15X. (DPI Photo by J. W. Lotz #850056-B-12)



Fig. 2. Oceanaspidiotus araucariae, adult male armor (arrow), 15X. (DPI Photo by J. W. Lotz #850056-B-4)



Fig. 4. Oceanaspidiotus araucariae, damage to Araucaria heterophylla in Florida, 10X. (DPI Photo by J. W. Lotz #850056-B-1)