

Plant Damage

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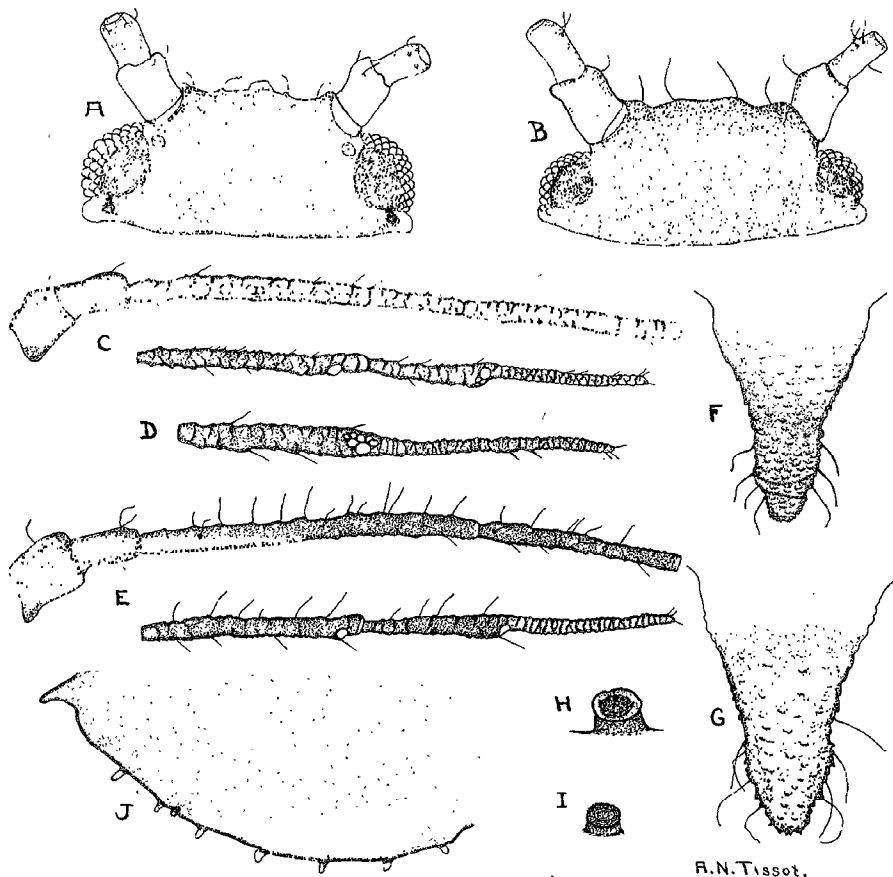
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A NEW DOGWOOD APHID FROM FLORIDA*

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Explanation of Plate—A, head, C, antenna, D, sixth segment more enlarged showing group of small sensoria, F, cauda, H, cornicle, J, right side of abdomen showing lateral tubercles and cornicle of alate vivipara; B, head, E, antenna, G, Cauda, I, cornicle of apterous vivipara.

*Contribution from Department of Entomology, Florida Agricultural Experiment Station.

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Pergandeidia corni n. sp.

Early in April 1928 a few colonies of this aphid were found feeding on the underside of the leaves and along the tender shoots of one of the small flowered dogwoods, *Cornus microcarpa* Nash. The aphids were confined to two or three plants growing in close proximity to each other and a careful examination of all other plants of this species growing within several rods of this area failed to reveal a single specimen of the aphids and they have never been found in any other locality. At this time about half of the mature individuals were winged and the rest wingless. For the next few weeks there was little change in the number of colonies or of the individuals in them but by early summer the number of insects decreased rapidly and by midsummer only a very few specimens could be found; however they were never entirely absent which would seem to indicate that they have no alternate food plant or at least that they can spend the entire time on the dogwood. When the weather became cool in the fall they began to increase in numbers and by the first of November there were a few flourishing colonies. At no time in the fall were any winged individuals or any with wing pads found. By February no sign of any sexual forms had appeared so it seems probable that this species reproduces parthenogenetically during the entire year in Florida.

The colonies are always covered with a woolly gray wax, the insects themselves often being completely hidden from view. They are not easily disturbed but when they move about they carry a mass of the woolly matter with them. On dropping the insects into alcohol or when mounting the live insects in balsam this waxy material instantly disappears.

These insects appear to be entirely independent of any other species of insects. Ants have never been observed attending the colonies and at no time have any parasites or predators been found. The feeding of the aphids has no apparent effect on the host plant except that the leaves bearing the colonies may be somewhat stunted in size. After all living aphids in a colony have disappeared some of the woolly material and cast skins often adhere to the under side of the leaf for several weeks or even months.

Pergandeidia corni* n. sp.

Apterous vivipara.—Body covered with light-grayish waxy material. When this is removed the brown color of the body is revealed; this brown color uniform in all parts of the body with the exception of the mid-portion of the abdomen where the embryos show through the body wall as lighter areas; length of body including cauda 1.71 to 2.11 m.m.; head rounded in front without antennal tubercles, eyes rather small, black; antennae brown, slightly shorter than the body, armed with a few rather prominent hairs, without sensoria except the primary apical one on the fifth segment and a group of small ones at the base of the spur of the sixth segment; antennal III, 0.35 to 0.42 m.m., IV, 0.20 to 0.25 m.m., V, 0.22 to 0.26 m.m., VI, 0.14 + 0.18 to 0.15 + 0.24 m.m.; rostrum extending to the third coxae; legs rather long and slender, uniformly brown in color; tibiae 0.88 to 1.00 m.m. long; thorax and abdomen with prominent lateral tubercles; cornicles very small and inconspicuous though visible in freshly mounted specimens, but usually invisible in specimens that have been mounted in balsam for some time, 0.022 m.m. long, scarcely as long as wide; cauda brown, long, broad and tapering with only a few (usually four on each side) rather prominent hairs; anal plate brown, almost hemispherical, with several hairs.

Alate vivipara.—Size 1.44 to 2.17 m.m. long; head olive-brown without antennal tubercles, rounded in front with very prominent median ocellus, eyes black with rather large ocular tubercles, rostrum brown reaching to third coxae, antennae uniformly brown thruout their length with a few minute hairs, first two segments thick remaining segments slender, antennal III, 0.35 to 0.41 m.m. long and armed with 7 to 10 more or less circular sensoria which are very irregular in size and arranged in a generally straight row extending most of the length of the segment; IV, 0.18 to 0.26 m.m. with 0 to 2 sensoria which may be located anywhere on the segment; V, 0.21 to 0.24 m.m. without sensoria except the apical primary one; VI, 0.13 + 0.17 to 0.14 + 0.22 m.m. with a group of several small seensoria at the base of the spur; prothorax reddish-brown with a prominent tubercle on each side, other two segments dark brown; legs long and slender uniformly brown except a small basal portion of the femora which is lighter brown; tibiae 0.82 to 1.04 m.m. long; wings hyaline, veins dark brown or black, stigma dusky, forewings considerably longer than the body 2.24 to 2.66 m.m. in length, rather narrow, the median vein twice branched the second fork usually being quite near the tip of wing, hind wing comparatively small and narrow, both media and cubitus present; abdomen a uniform reddish-brown except in the central portion where the embryos show through the body wall as lighter colored areas, seven prominent lateral tubercles on each side; cornicles brown, inconspicuous, not easily visible in specimens that have been mounted in balsam for some time but more easily seen in freshly mounted specimens, 0.033 m.m. long, length about equal to the width; cauda large with 3 or 4 hairs on each side, dark brown; anal plate rounded with several slightly curved hairs.

*The writer wishes to express his thanks to Dr. P. W. Mason of the U. S. Bureau of Entomology and to Mr. G. F. Knowlton of the Utah Agricultural Experiment Station for their opinions concerning this form.

Described from numerous alate and apterous viviparous females. Color notes made from fresh specimens, measurements from specimens mounted in balsam.

All specimens were collected by the writer in the grounds of the Florida Agricultural Experiment Station at Gainesville.

In addition to the writer's collection, cotypes are in the collections of the Florida Agricultural Experiment Station, of the U. S. National Museum and of Mr. G. F. Knowlton.

A NEW JUNIPER APHID FROM UTAH

WITH NOTES ON A FEW OTHER SPECIES

PART II

GEORGE F. KNOWLTON

Utah Agricultural Experiment Station

Chromaphis juglandicola (Kaltenbach)

This small yellow aphid occurs on the underside of the leaves of English walnut, *Juglans regia* L. In Utah, it ordinarily occurs in small numbers, but during the summers of 1923 and 1925 it occasionally became abundant enough at Brigham City and at Salt Lake City to cause a slight smutting of the foliage.

Euceraphis flava Davidson

This aphid was collected in American Fork Canyon, Utah, on July 6, 1925. The winged female produces a woolly secretion over the body, and feeds on the underside of the leaves of the alder, *Alnus tenuifolia* Nutt. This collection was made at an elevation of 7000 feet.

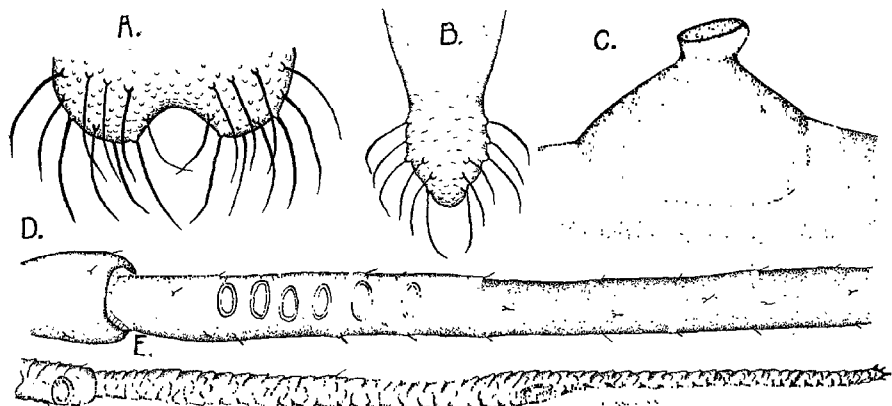


Fig. 2.—*Euceraphis flava* Davidson.—A, anal plate; B, cauda; C, cornicle; D, base of third antennal, showing sensoria; E, sixth antennal, all of alate female.