AN APPARENTLY NEW SUGAR-CANE MEALYBUG[1]

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INTRODUCTION

The mealybug described below has been reported as injurious to sugar cane in certain localities in Cuba, and is now the subject of study by the entomologists of the Tropical Plant Research Foundation. A review of the systematic literature on the group to which it has been assigned indicates that the species has not yet been described, and this description is therefore offered in order to make it known and to facilitate reference to it in any future publications regarding its injuriousness.

GENUS RIPERSIA SIGNORET

The genus Ripersia, as now accepted, does not contain a well defined, homogeneous group of species, but instead is little more than a dumping ground for species of mealybugs having 6-segmented antennae and living on members of the Gramineae, or on the roots of other plants or in ants' nests. Such being the case, few precise suggestions can be offered respecting the actual relationship of the form now described.

RIPERSIA RADICICOLA, new species

Described from alcoholic specimens only; no information available regarding the character and extent of the external secretionary covering.

Occurs on the roots of the host plants.

Adult female.—Very stout oval, almost circular in outline, strongly convex, length of fully developed form as mounted 3.5 mm., width about 3.25 mm.; antennae 6-segmented, placed rather close together, although not contiguous, lengths of segments of one in microns as follows: I, 53; II, 50; III, 70; IV, 28; V, 43; VI, 86; segment V with one, VI with three to four stout setæ in addition to slender setæ; legs short and small but stout, not otherwise unusual; measurements of a posterior leg in microns as follows: Coxa, 200; trochanter, 90; femur, 168; tibia, 136; tarsus, 90; claw, 34; hind coxa with numerous, but scattered, tiny pores on both faces, claw without denticle, claw digitules threadlike but distinctly knobbed at apices, barely reaching tip of claw, tarsal digitules more slender, not knobbed; beak elongate conical, distinctly 2-segmented, length about 195 μ; both anterior and posterior pairs of ostioles present, small and inconspicuous; only the posterior apical pair of cerarii developed, each made up of a pair of small conical spines and a loose cluster of triangular pores; anal lobes, as such, wholly undeveloped, apical seta placed

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immediately beneath apical cerarius, without chitinized thickening adjacent, each seta about 200 μ long; body with triangular pores, scattered fairly uniformly, more numerous along the margin and posteriorly, with relatively few multilocular disk pores around the vaginal opening, and with numerous large tubular ducts in loose clusters along the abdominal margin, a few scattered along the margin anteriorly, and in transverse rows ventrally in the abdominal region; body setae few, small, slender, inconspicuous, most abundant adjacent to the duct clusters, anal ring slender with two rows of pores and six setae, the longest of these about 118 μ; ventral cicatrix not located, apparently not present.

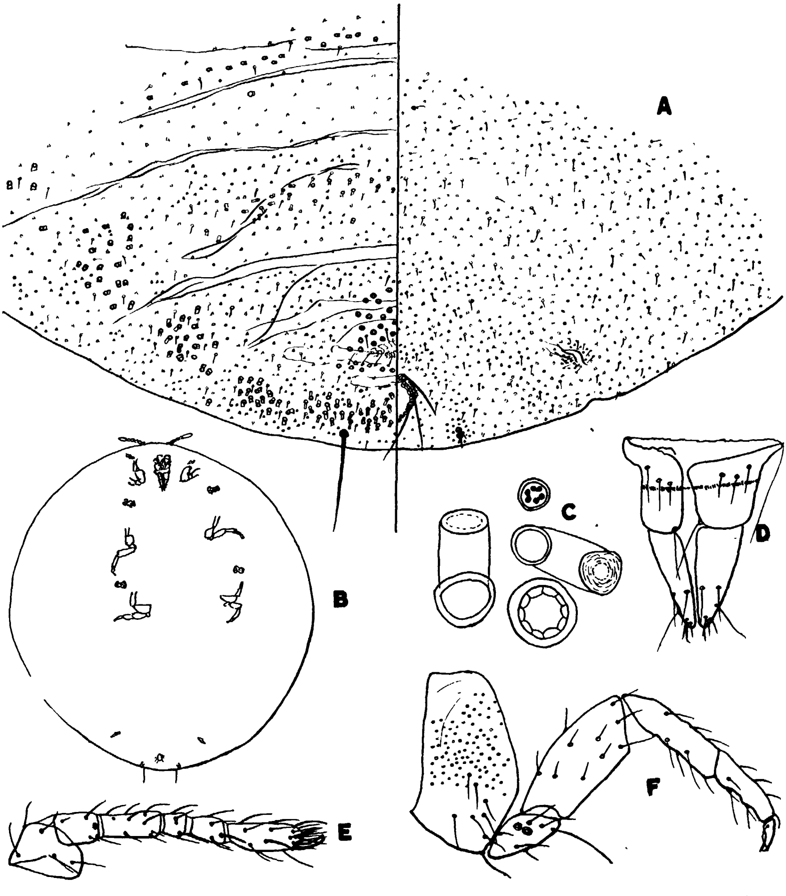

FIG. 1.—*Ripersia radicicola*, adult female. A, apex of abdomen, dorsal and ventral, × 230; B, outline of body, optical section, × 12; C, types of body pores, × 1275; D, beak, × 120; E, antenna, × 120; F, leg, × 120

This species has been described after an examination of microscopic slide mounts from the following lots of material: On roots of sugar cane, Jobabo, Cuba, January 21, 1925, collector C. F. Stahl (Tropical Plant Research Foundation No. 14a Ent.) (holotype and paratypes); the same, December 3, 1924 (T. P. R. F. No. 14 Ent.) (paratypes); the same, collected January 23, 1925, T. P. R. F. No. 14b Ent.) (paratypes); on Crystallina roots, same locality, forwarded by W. A. Orton, August, 1924 (paratypes); Central Baragua, Cuba, on sugar cane, May 6, 1925 (T. P. R. F. No. 1081 Ent.) (paratypes), and May 13, (T. P. R. F. No. 1097 Ent.) (paratypes); same locality on grasses; May 6 (T. P. R. F. No. 1082 Ent.) (paratypes); on cane roots, eastern Cuba, collector S. C. Bruner (No. 9027), received with letter of December 14, 1923 (paratypes); Soledad, Cuba, February 27, 1925, collector J. G. Myers (No. 591) (paratypes); Habanilla, Cuba, April 7, 1925, collector J. G. Myers (No. 684) (paratypes); on roots of *Echinochloa colonum*, Baragua, Camaguey, Cuba, April 21, 1926, collected by C. F. Stahl (paratypes).

The types of the species are in the United States National Collection of Coccidae.

The insect herein described has been compared with specimens or descriptions of all of the mealybugs that have been reported to occur on sugar cane. It has also been compared with all of the species of Ripersia represented in the national collection. Of these it resembles the species *Ripersia anomala* Newst. and *R. aurantia* Cockerell in that all have clusters of relatively large, short tubular ducts present along the body margin; it differs from both of these in several particulars, but most conspicuously in having only the single posterior apical pair of cerarii developed, the other two species having the series of marginal cerarii complete, or practically so.

No definite statement can be made as to the original home of the species. The very limited information now available suggests the possibility that it is native to Cuba and has transferred its activities from some indigenous plant, probably a grass, to sugar cane.