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Two new species of *Cinara* (Aphidae)

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TWO NEW SPECIES OF CINARA (Aphidae).

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CINARA MINUTA Hottes and Knowlton, n. sp.

APTEROUS OVIPAROUS FEMALE.

Length from vertex to end of anal plate varying from 2.28-2.36 mm. Color notes from life not available. Color in life perhaps rather pale. Femora pale with apical portions darker. Tibiae with knees dusky, apical region the same, region in between pale. Antennae pale dusky with segments five and six almost uniform in color. Mesosternal tubercle absent. Ocular tubercles very small. Antennal segments with the following lengths: III .35-.37mm., IV .15, V .19, VI .12 + .04mm. Secondary sensoria distributed as follows: III 0-1, IV 0, V 1. Antennal hair sparse, rather upstanding, set at an angle of about sixty degrees, or more. Antennal hair less than two times width of segment in length. Rostrum long, reaching to ventral plate. Hind tibiae 1.35mm. in length. Sensoria on hind tibiae very faint, difficult to see, perhaps rather atipic, distributed through-out length of tibiae. Tibial hair fairly numerous, upstanding, more numerous on inner margin than on outer. All tibial hairs shorter than width of segment. Cornicles .21mm. across base, with numerous long fine hairs, similar to those on dorsum of abdomen, and about .07mm. in length. Transverse pigmented spot apparently absent. Cauda very small and narrow.

DATA: Alpine Fir, *Abies lasiocarpa*. Richards Canyon, Utah. Sept 4, 1938. Nye, collector. Holotype oviparous female, deposited in the United States National Museum. This species differs greatly from other species taken on Fir. Its small size, dark cornicles, and short hairs, separate this species at once from most species taken on this host, its larger cornicles and the presence of hairs on the cornicles separate it from *C. pacifica* (Wilson) which has the hairs somewhat similar.

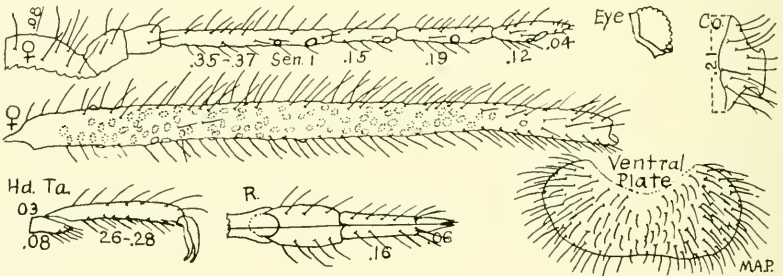
CINARA ENIGMA Hottes and Knowlton, n. sp.

APTEROUS VIVIPAROUS FEMALE.

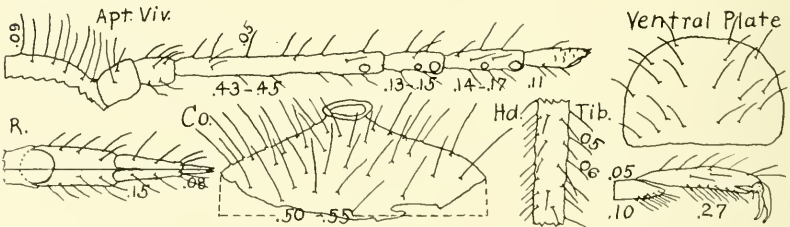
Length from the vertex to end of anal plate varying from 2.78-3.43mm. Described from cleared specimens. Color notes from life

not available. Head and thorax dark dusky brown. Dorsum of meso and metathorax with pigmented areas, arranged more or less in two rows. Antennal segments one and two concolorous with head, third segment light dusky with apical portion of segment darker, segments four, five and six almost uniform dusky. Femora dusky with apical regions darker. Tibiae with knees dark, followed by a pale area, which is in turn followed by a dark area which extends for about half the length of the tibiae. Tarsi dusky. Spiracles with large pigmented areas. Cornicles with base very irregular, sometimes with one or more clear areas, dark brown in color. Cauda and anal plate dusky. Anterior to the transverse pigmented area there are several small pigmented areas.

Head with transverse suture rather pale, provided with a moderate number of hairs. Antennal segments with the following lengths: III .43-.45mm., IV .13-.15mm., V .14-.17mm., VI .11 + .02mm. The unguis is sometimes shorter than the length indicated. Primary



Cinara minuta n.sp.



Cinara enigma n.sp.

sensoria present on segments three, four, five and six. Secondary sensoria distributed as follows: III 0-1, IV 0-1, as a rule one, V 1. Marginal sensoria on VI small almost all rim, rather far removed

from primary, in some cases difficult to see. Hair on antennae sparse, rather upstanding, in length less than twice width of segment, some hairs on segments four and five longer than others. Unguis unique, very short, blunt, hardly a nubbin and little differentiated from rest of segment. Ocular tubercles present but small. Rostrum extending to metathoracic coxae. Last three segments of the rostrum with the following lengths: .21, .15, .08mm. Mesosternal tubercle absent. Hind tibiae 1.57mm. in length. Hind tarsal segments .10 and .27mm. in length. Hair on hind tibiae sparse, upstanding, less than width of segment in length, hair on outer margin coarser and more upstanding than the hair on the inner margin. First segment of hind tarsi with about eight hairs. Cornicles with base varying from .50-.55mm. outer margin of cornicles very irregular, this area has fewer hair than the raised portion. Hairs on dorsum of abdomen about .1mm. in length, quite numerous. Transverse pigmented area anterior to cauda divided or almost so, with one row and a partial second row of long fine hairs, these hairs are the longest on the body. Dorsum of abdomen very finely reticulated but the reticulations are difficult to make out. Cauda and anal plate with long fine hairs, surface between hairs coarsely setulose.

Our information relative to this species is very meager and unsatisfactory and were it not for the peculiar structure of the unguis, which, very easily differentiates this species from allied forms, it might better not be described. The host is indicated first as cucumber, this has been crossed out and conifer? substituted, which is better, we suspect some species of *Pinus*. The locality is indicated as Pass, Colorado, but there is no such place. Perhaps it was taken a conifer growing along one of the numerous Passes in Colorado, but which one we do not know. We are sure that it was taken on June 20, 1943 by Barrows. Holotype apterous viviparous female, deposited in the United States National Museum. In Palmer's key to the genus *Cinara* in "Aphids of the Rocky Mountain Region," this species can not be keyed beyond couplet 23, because of the shortness of rostral segment four. As indicated the unguis of this species is unique.