

produced. As most field colonies, some laboratory-founded colonies produced predominantly males and workers and only few gynes. No pattern could be recognized in the production of the female phenotypes, some colonies yielding only "dull" gynes, others both "shiny" and "dull" specimens. Since the difference between slightly "dull" and "shiny" gynes was not recognized before the end of the experiments (and because many gynes were lost due to death and dismembering in the colonies), we are unable to provide numerical ratios of the various phenotypes reared. It is also not possible to tell the type of queens used for artificial colony foundation. Only from one experiment we are sure that "dull" gynes were offspring of a "shiny" queen, as in field colony # 3.

#### *Workers and males of Dorymyrmex pocahontas*

Workers of *D. pocahontas* (Fig. 4) are easily distinguished from *Leptothorax* (s. str.) *retractus* (compared with specimens from Maligne Canyon, Alta., Jasper, Alta., Kinney Lake, B. C.) and large black *Leptothorax* D (Maligne Lake, Alta.; Lake Edith Cavell, Alta.) by the shape of the petiolar node, which is rounded in lateral view in *D. pocahontas* but sharply angled in *L. retractus* (Francoeur, 1986) and rather flat in *Leptothorax* D. Furthermore, the anterior margin of the clypeus is deeply notched in workers of *L. retractus* but not so in *D. pocahontas*. From *Leptothorax* C (Maligne Canyon, Alta.; Jasper, Alta., Kananaskis, Alta., Manning, B. C.), workers of *D. pocahontas* differ in the shape of their postpetiole, which in dorsal view is markedly trapezoidal. The hairs on petiole, postpetiole and gaster are distinctly longer in *D. pocahontas* (0.06–0.1 mm) than in *Leptothorax* C (0.04–0.06 mm).

As in queens, the sculpture of *D. pocahontas* males (Fig. 5) is highly variable. Nevertheless, at least dorsal and lateral parts of the propodeum were shiny and smooth in most examined individuals. The propodeum of males of all examined *Leptothorax* (s. str.), is opaque, often roughly sculptured or wrinkled.

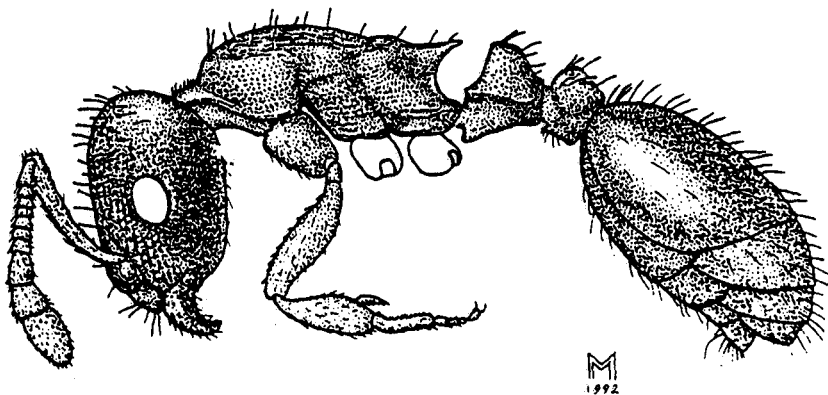


Figure 4. *D. pocahontas* worker from field colony #1, Scale bar 1 mm