

distinction is a short antennal scape. For clarity of presentation, *M. scabrinodis* is omitted from the subsequent analyses, although its inclusion should have no effect on the discrimination between the other species; this would be done by lower level canonical variates (ie Cv3, Cv4, etc.).

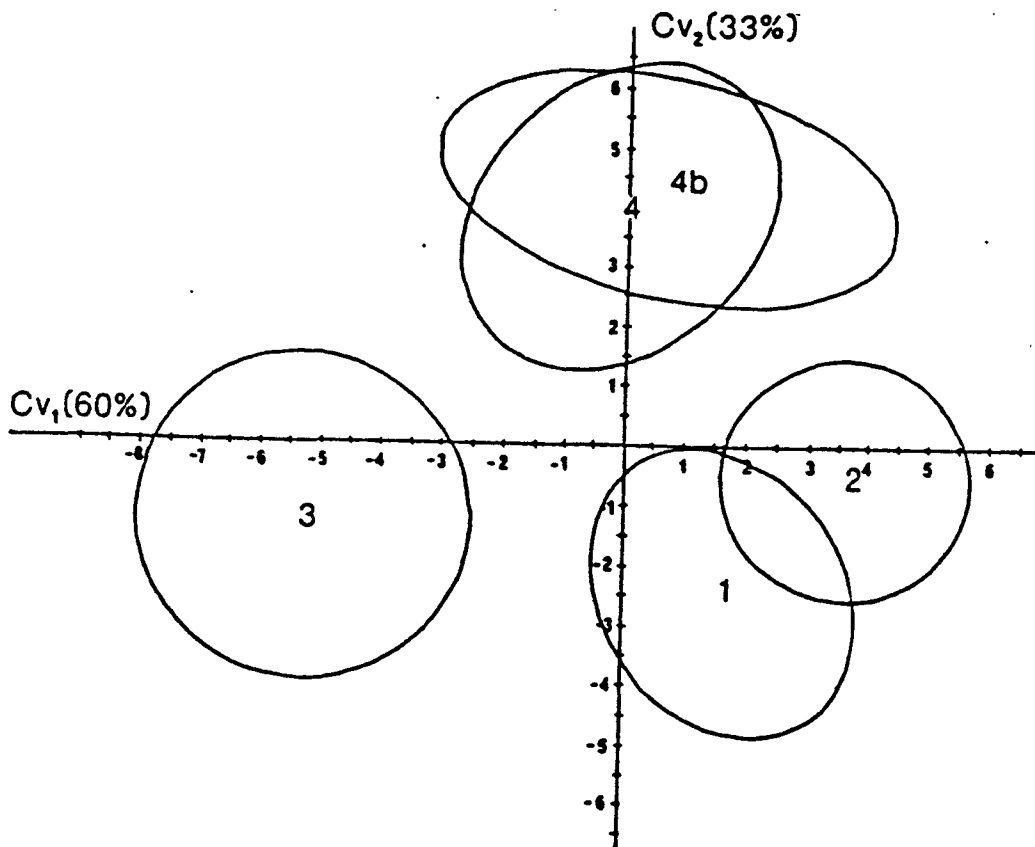


Figure 4: Distribution of the Cv scores for *M. scabrinodis* 60 queens (1), *M. sabuleti* 60 queens (2), *M. hirsuta* 59 queens (3), and *M. vandeli* 6 type specimens (4b) and combined sample of 59 queens from 3 sites in France (4). The ellipses are the 95% confidence limits.

Note: the large apparent variance of the type specimens is due to the small sample size.

Somewhat unexpectedly, the *M. hirsuta* from the DDR were discriminable from those caught by Elmes (1978) (but remember that no discrimination could be made between the females from DDR and UK). The most obvious difference is the DDR specimens' greater pilosity and wider post-petiole - the characters most often associated with parasitic ants. This is not so surprising if one accepts the theory of the independent occurrence or evolution of *M. hirsuta* parasites within *M. sabuleti* populations, as proposed by Elmes (1978). The haploid males might be expected to show greater individual variation than the diploid females in all species, and this might be exaggerated if the various geographical races of *M. hir-*