# THE BUMBLE BEES OF FLORIDA[1]

P. W. FATTIG

Altho there are 58 species of Bombidae in the U. S.,—47 of the genus Bombus—the true bumble bees, and 11 of Psithyrus—the parasitic bees; only five species, four Bombus and one Psithyrus, occur in Florida. Thus it is seen that these bees are but poorly represented in Florida. They are most abundant in the Rocky Mountains. The following key will enable the reader to separate our species.

A. Outer surface of hind tibiae convex and hairy; face of males black **Psithyrus.**
Abdomen of female entirely dark; that of male very variable..... **P. variabilis.**

AA. Outer surface of hind tibiae of female concave and smooth; face of male usually with yellow..... **Bombus.**
a. Thorax with a distinct black band.
b. First and second segment of abdomen yellow....**B. fraternus.**
bb. First, second and third segments of the abdomen yellow..... **B. pennsylvanicus.**
aa. Thorax without a distinct black band.
b. Dorsum of the abdomen with the first segment yellow and the remaining segments black.....**B. impatiens.**
bb. Dorsum of the abdomen with the first segment yellow, the second segment more or less brown-ferruginous on the basal portion, especially in the middle—the remaining segments black .....**B. separatus.**

*B. fraternus* nests in the ground or in holes in stumps or trees at the level of the ground. It is one of the most pacific of the bumble bees. Its coloration is very constant.

*B. impatiens* also nests in the ground.

*B. pennsylvanicus* nests on top of the ground, usually in old mouse nests and similar situations. Occasionally the nests are subterranean.

*B. separatus* nests in the grass on the surface of the ground. It is one of the most pugnacious of bumble bees when its nest is attacked.

Bees of the genus Psithyrus are parasitic on the true bumble bees which they mimic in color and actions. Usually they mimic most closely the species of Bombus on which they are parasitic. The Psithyrus queen enters the Bombus nest and kills the queen. The young Bombus bees then adopt the Psithyrus queen, feed her and tend and raise her brood.

[1]Abstract of a paper read before the Fla. Entomological Society March, 1920.