

the extreme northern and southern points of our region, though so widely separated, than there is between the Mexican province and the adjacent United States region. This conclusion is, however, invalidated by two great facts: first, that the Bruchides of the United States have not been thoroughly collated with those from our region (owing to the very imperfect condition of collections of this family a great many of the North-American species are quite unknown in Europe), so that there may be a greater community than is yet ascertained; second, that the borderland, where the greatest community between the two regions will be undoubtedly found to exist, has been inadequately explored.

### BRUCHUS.

*Bruchus*, Linnæus, Syst. Nat. ed. xii. p. 604; Schönherr, Syn. Ins. Curc. i. et v.

*Kytorhinus*, Fischer, Mém. Soc. Imp. Mosc. ii. p. 298.

*Pachymerus*, Latreille, Fam. Nat. Règne anim. p. 386.

*Adromisus*, Gozis, Bull. Soc. Ent. Fr. 1881, p. cxiii.

*Andromisus*, id. Rev. d'Ent. iv. p. 125.

After separating *Caryoborus* this genus will still comprise about 500 described species, and is found in most parts of the World. The study of the insects of this genus is at present a matter of great difficulty, no recent monographer having dealt with it, and the arrangement suggested by Schönherr for the comparatively small number of species known to him being eminently unsatisfactory. Indeed all the structural characters appear to grade off again and again in the genus, so that no one of them, as far as I have observed at present, can serve the purpose of dividing the species even in a preliminary manner. The specific distinctions in fact frequently consist of modifications of the very characters that have been used to define the groups of species. Schönherr relied on the dilatation of the femora and on the shape of the thorax, but each of these characters is among the most variable of the genus. Dr. Horn has lately employed the denticulation of the hind femur with satisfactory results so far as the North-American species are concerned; but this will not help much as a means of facilitating determination of the more numerous species found in our region. In our species the normal denticulation of the femur in the genus appears to be one long tooth and two small denticles, and this character occurs in several forms that in other respects are very dissimilar; but, on the other hand, species that are very closely allied differ in the number of denticles. The femoral denticulation, therefore, though of great importance, can only be employed in subordination to other characters, and its value in any case as a means of arrangement is largely discounted by the great number of species that fall into the category of one tooth and two denticles; thus it happens that Dr. Horn in arranging the North-American species into nine groups, has to place half the species in one of these. I have, for the purpose of facilitating the labour of