

Asia; yet, in consequence of their size and the abundance of individuals, perhaps more conspicuous and equally prevalent in tropical America. There are about 100 genera and 900 species; and of these fifteen and 115 respectively are known to inhabit Mexico and Central America. But these numbers are probably considerably below those actually existing; that for species especially, as we record only ten from Nicaragua and fourteen from Panama. *Porphyrospatha*, a genus of two described species, is restricted to Costa Rica, and the only one endemic within our limits. On the other hand, ninety-nine of the species have not been recorded from elsewhere. *Philodendron* and *Anthurium*, both exclusively American, the former numbering about 120 species, the latter 160, are the most conspicuous and pervading genera throughout tropical America. Many of the species are lofty climbers, reaching the tops of the tallest trees. Other large forms are the species of *Xanthosoma* and *Monstera*; but these are all surpassed in size of leaf and inflorescence by the Nicaraguan *Dracontium gigas* (syn. *Godwinia gigas*), which has a spathe two feet long, though this, again, is small in comparison with the Sumatran *Amorphophallus titanum*, which has leaves twenty-five feet, and spadices six feet long.

#### *Gramineæ.*

Reference has already been made (vol. iii. p. 475) to Fournier's 'Monograph of the Mexican Grasses,' in which a much narrower view of the limits of genera and species is taken than in this work. So great indeed is the difference, that his totals of genera and species for Mexico alone considerably exceed ours for Mexico and Central America together. He recognizes 123 genera, sixteen of them being endemic, and 643 species, 371 of which he estimated to be endemic. It is unnecessary to repeat our reasons for not accepting the greater part of his proposed new species. Had we included them in our calculations they would, from our standpoint, have greatly exaggerated the endemic element, as will be perceived from the following numbers:—genera ninety-nine, endemic six; species 520, endemic 265. There is no doubt, however, that these numbers will be very considerably augmented by future investigations in the southern part of our area, as, for instance, in Costa Rica, whence we have only nine species.

The grasses of Ersted's Costa Rica collection have not been elaborated; and it appears to have been the practice to distribute the duplicates as the plants were published. From the Table, p. 199, it will be seen that we have worked out the distribution of the two great "series" of grasses—the Panicaceæ, distinguished by the spikelet being articulated with the pedicel below the outer glumes, and the Poaceæ, in which the articulation is above the outer glumes; but the results do not demand any special remarks in this place. In addition to the six endemic genera, twenty-six others are restricted to America, and no fewer than fifty-nine are of wide distribution. Of the non-endemic species 214 are restricted to America, which, added to the endemic, leaves a residue of forty-one that extend beyond America. Adding the Mexican genera and species which are not localized to the South Mexican, we have a total of ninety-one