

*Scrophularineæ.*

This order is generally spread, yet it is perhaps nowhere so strongly represented generically as in Mexico, where there are forty-two genera, nine of which are endemic; twelve others are wholly American, and twenty-one extend to other countries. The last number is proportionately higher than in the majority of the large orders of dicotyledons. The total number of genera in the order is about 170 and the species are estimated at nearly 1900. A. DeCandolle\* calculated the percentages in numerous floras, large and small, of several of the larger orders, among them the Scrophularineæ. In the first part of Bentham's 'Plantæ Hartwegianæ,' collected in Mexico and Guatemala, and numbering 630 species, chiefly from temperate and subtropical regions, he found that this order constituted 6 per cent.; but so high a proportion can only be regarded as accidental, though no doubt it is very much higher for these regions than for the entire area. Martius† calculated that the Scrophularineæ constituted about 1.5 per cent. of the species of the Brazilian phanerogamic flora, and this is exactly the proportion for the whole of Mexico and Central America. Six of the endemic genera are monotypic; and equal numbers of the whole extend to eastern and western North America; but those of north-eastern extension contain a larger proportion belonging to genera of extra-American distribution. The Andine and Antarctic American genus *Calceolaria* has its northern limit in South Mexico. This is also represented in the Falkland Islands and New Zealand. *Pentstemon*, with the exception of one species in North-eastern Asia, is exclusively American and chiefly western; and of the twenty-one species in Mexico two reach Guatemala. The South-African genus *Phygelius*, however, is so near *Pentstemon* that if it were from the same country it would probably have been put in the same genus. The other large genera are, *Castilleja*, which has a wide range in America and one of the species is also found in North-eastern Asia, and the endemic *Lamourouxia*. Coming to the species, we find that only nine out of 170 extend beyond America, and 103 are endemic within our boundaries.

*Gesneraceæ.*

All the tribe Gesnereæ and the subtribe Columneæ of the tribe Cyrtandreæ are American, ranging from South Mexico and the West Indies southward to Chili and South Brazil. It is true that *Achimenes scheerii* is recorded from Chihuahua in our enumeration, but on reference to the place of publication we find that it was received through Mr. Potts of Chihuahua; therefore it is possible, in fact most probable, that he obtained it from South Mexico, as it would otherwise be widely isolated from the rest of the order. Twenty genera of this group are Mexican or Central American and three of them are endemic in South Mexico and Guatemala; and 133 out of 144

\* Géographie Botanique, ii. pp. 1189-1250.

† Flora Brasiliensis, Scrophularineæ, p. 332.