

A NOTE ON THE OCCURRENCE OF SALVIA IN THE NEW WORLD

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The subgenus *Calosphace* of *Salvia* includes nearly five hundred species, and, due to the localized nature of many of the species, each venture from the beaten path within the tropics brings new species to light. This large group is homogeneous but nevertheless separable into a series of species constellations

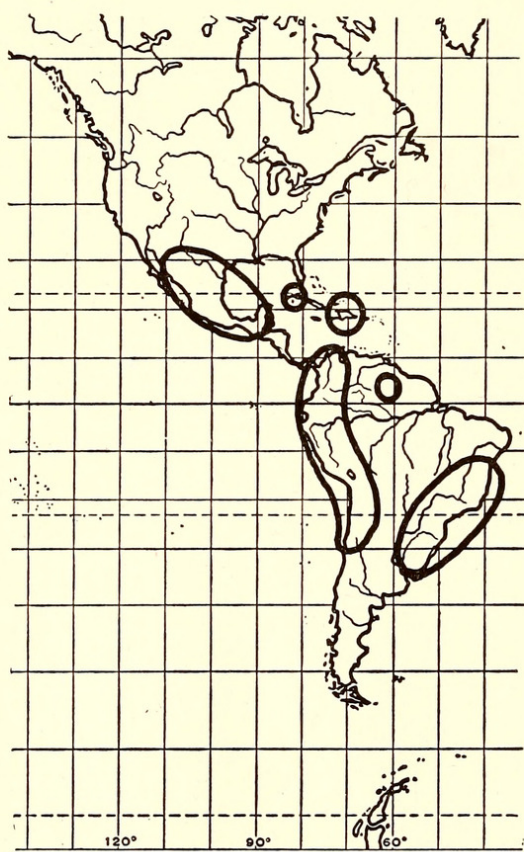


FIG. 1. Chart showing the principal concentration areas of *Labiatae* in the New World.

ninety-two in number. These vary in size from monotypic groups to groups of forty species or more. Each gives the impression of an immediate origin from a single source through means other than hybridization, as though through fragmentation of a single species. In general the species which comprise them are of the same growth form with essentially similar habits of inflorescence. They have flowers of essentially the same conformation, which differ nevertheless in size and proportion. Such constellations differ among themselves by differences in habit, in inflorescence and in the details of flower structure. Each suggests a species group of close relationship and not improbably form coenospecies in the sense of Turesson. I have treated them as sections.

The distribution of *Salvia* subgenus *Calosphace* in the New World is characteristic of most of the genera of *Labiatae* which are confined to the New World. The distribution of those genera which are also Eurasian is of a different nature and will be dealt with in a later paper. While it is true that the genus ranges continuously from the Great Lakes to the plains of Argentina it is concentrated in three principal areas of wide extent and three small subsidiary areas which are characterized by endemism. The first mentioned are the highlands of Mexico, particularly the central portion, the northern Andes and the Brazilian highlands. The subsidiary areas which are characterized in some degree by endemism are the

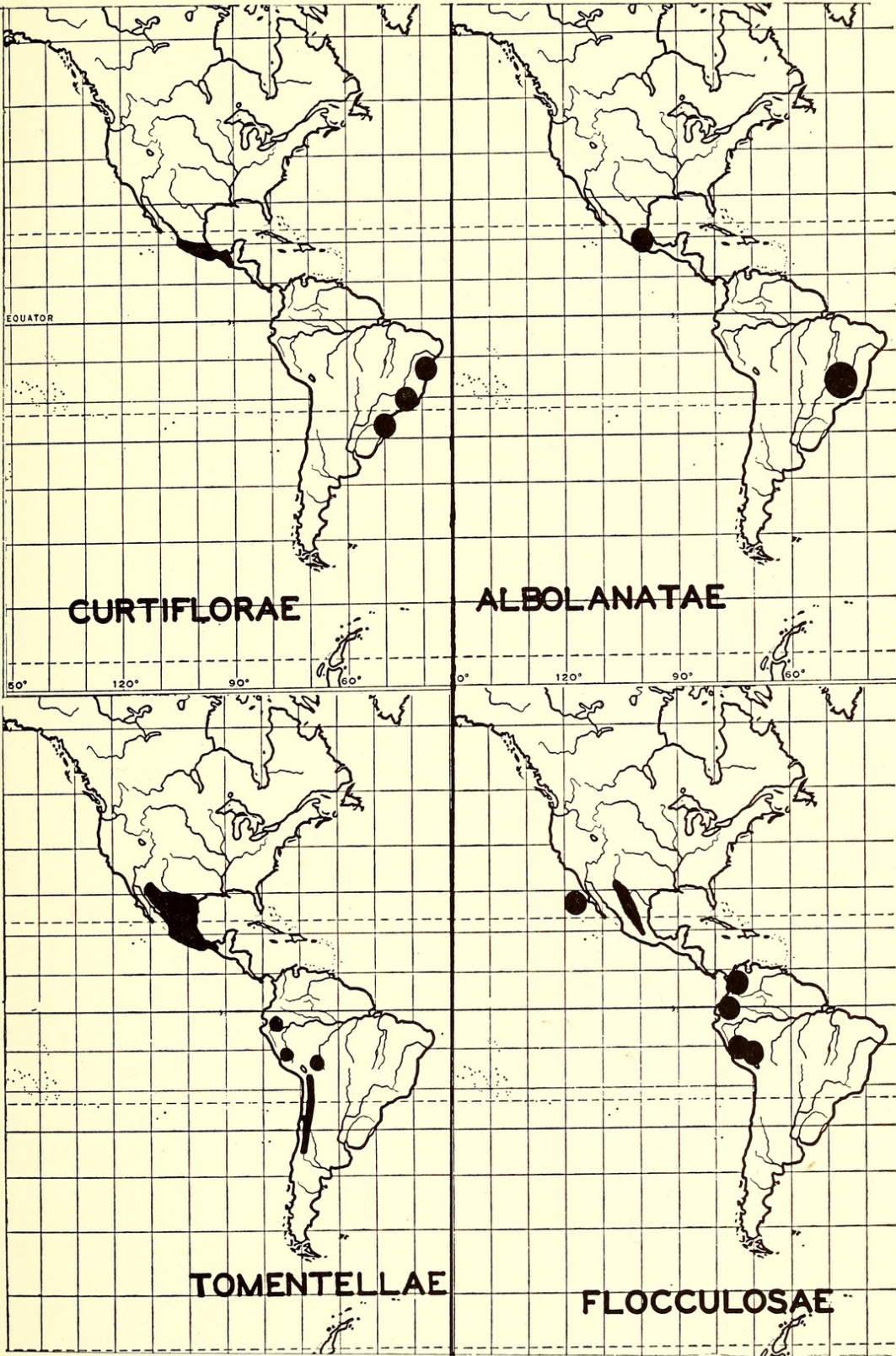


FIG. 2. Charts showing the distribution of *Salvia*, subgenus *Calosphace*, sections *Curtiflorae*, *Albolanatae*, *Tomentellae* and *Flocculosae*.

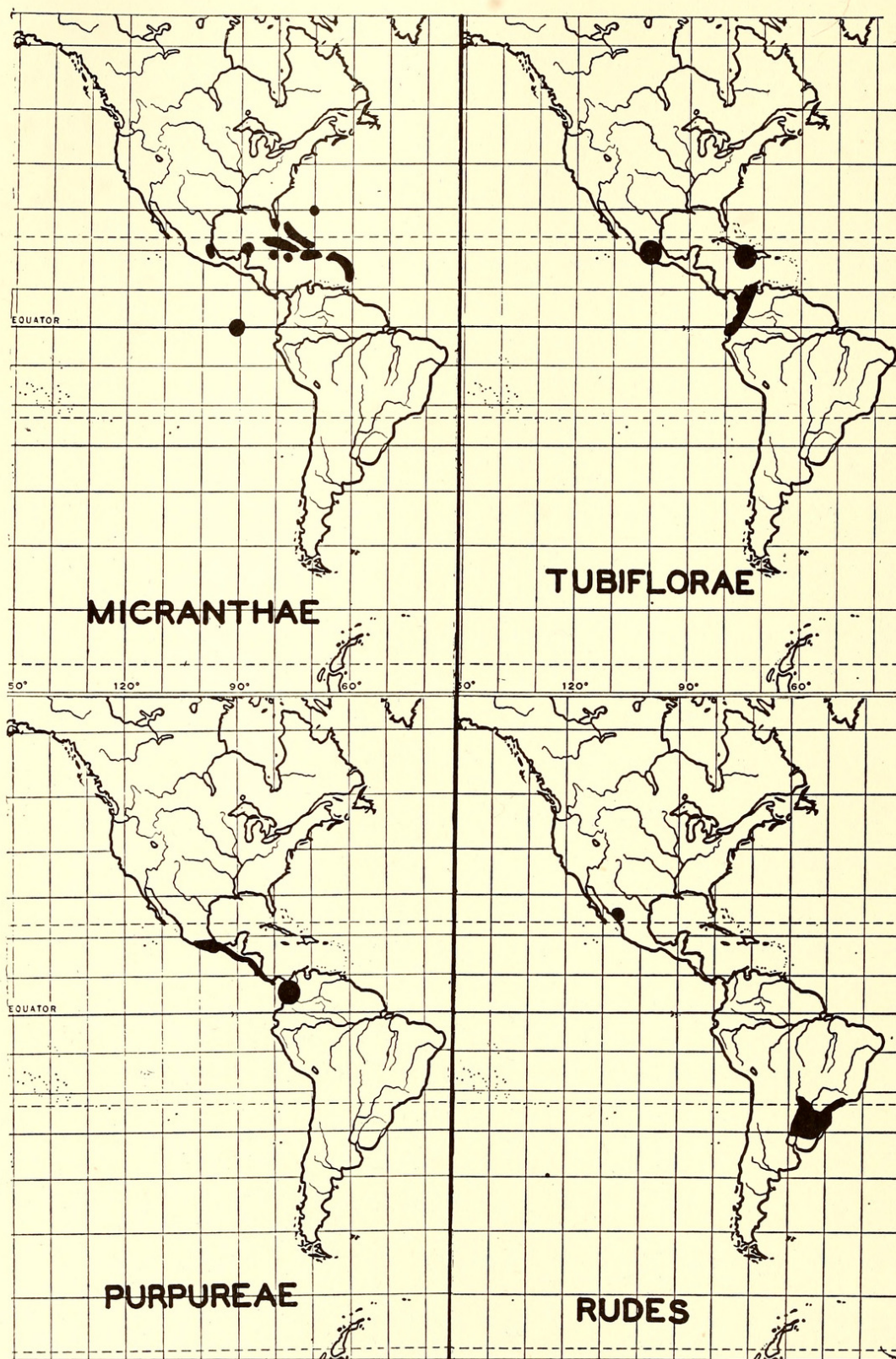


FIG. 3. Charts showing the distribution of *Salvia*, subgenus *Calosphace*, sections *Micranthae*, *Tubiflorae*, *Purpureae* and *Rudes*.

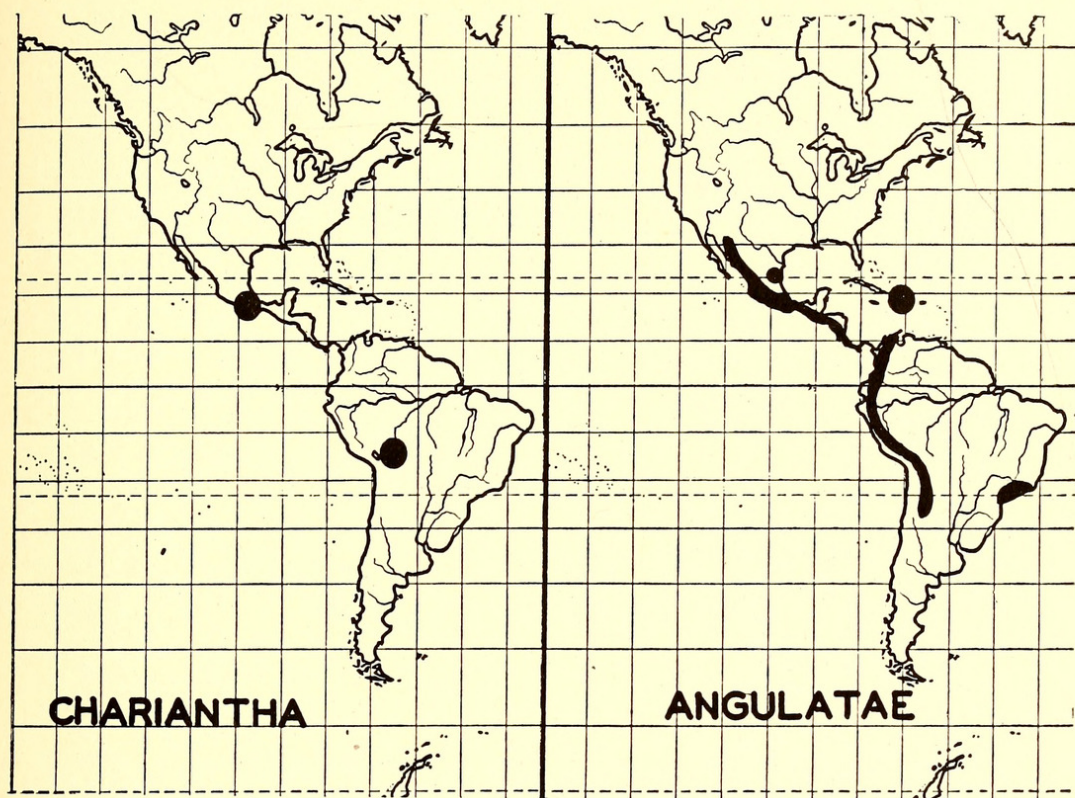


FIG. 4. Chart showing distribution of *Salvia*, subgenus *Calosphace*, sections *Chariantha* and *Angulatae*.

highlands of British Guiana, the mountains of Haiti and the mountains of Cuba (including the Isle of Pines). The areas of distribution of the sections are usually restricted and are generally one of three types. The first is illustrated by the sections *Chariantha*, *Flocculosae* and *Tomentellae*. In this case species of the Mexican highlands find close counterparts in species of the Andes, particularly of Ecuador and Peru. The second is illustrated by the sections *Albolanatae*, *Curtiflorae* and *Rudes*. In this case species of the Mexican highlands find close counterparts in the highlands of Brasil, but not in the Andes. The third case is largely a Caribbean distribution in which the section occurs more or less continuously in the islands of the Caribbean and the isthmus or the northern part of South America, usually at lower elevations. This is illustrated by such sections as *Micranthae*, *Tubiflorae* and *Purpureae*. Only the large section *Angulatae* is general throughout most of these areas.

Not only *Salvia* subgenus *Calosphace* but most of the genera of Labiatae which are confined to the New World (in contrast, for example, to those which are circumpolar) conform to this pattern; the significance of this fact is unknown.

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