
This monumental monograph is the scientific legacy of one of the greatest botanists of the 20th century, patiently worked out during an exceptional 64-year career, meticulously formatted by an active team of about ten collaborators, mainly from the Smithsonian Institute, lavishly illustrated by the famous artists Florence Lambeth and Alice Tangerini and luckily completed by a wide panel of about 25 specialists from Panama, Colombia, Venezuela and Chile. In brief this work combines unusually advantages of unity in research scope by an individual and power of a collective action.

The subtribe Espeletiinae Cuatrec. contains eight genera whose seven are dealt here: Espeletia Mutis ex H.&B., Carriamboa Cuatrec., Tamania Cuatrec., Libanothamnus Ernst, Ruilopezia Cuatrec., Coespeletia Cuatrec. and Paramiflos Cuatrec. The genus Espeletiopsis Cuatrec., previously studied (Cuatrecasas 1976, 1996), is no more taxonomically described. This group is highly remarkable by exhibiting strange habits, convergent with those of the giant Senecios also growing at high altitudes, but in East African mountains.

The whole treatment, nicely introduced by a history of botanical exploration of northern Andes, demonstrates a deep and accurate knowledge not only of the plant life on the field, but also of the morphoanatomical, ecological and functional researches. For example comparative studies of life forms (Chapter 2) use extensively numerous classical works, among them those of Humboldt, Wilhelm Troll, Francis Hallé, in order to define accurately the characteristic “caulirosulan” architecture. Interestingly histological adaptation to freezing and dry conditions is mainly expressed by a multilayered hairy cloak on the stem, crowded lanate leaves able to move (nyctinasty) for sheltering the apical bud and a compact pith. So, as in other plants of high altitudes (e.g. Rheum in Himalaya), a microclimate is created at the body level, and other alteration is no more needed in inner tissues.

The iconography is outstanding by its accuracy, clarity and neatness. Most often figures are arranged in comparative plates, so that main patterns are made obvious at a glance (e.g. in fig. 2-8, p. 27 for caulirosulan life-forms or fig. 6-2, p. 50, for stem barks). Even more theoretical sketches (e.g. fig. 9-1, p. 91, for capitulum structure and development or fig. 14-72, p. 279, for synflorescence variations in Espeletia species) are well explanatory. A great attention is devoted to morphological details such as indument, trichomes and vena-tion as well as their variation. Most of the descriptive plates and related measurements result from a substantial amount of work in restoring and dissecting the herbarium samples,