Introduction

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The concept of the genus Prangos

The genus *Prangos* has been differently delimited from other genera of the tribe *Smyrnieae* (*e.g.*, Bentham & Hooker 1967, Drude 1898, Tutin 1968). The genera united with or separated from *Prangos* are mainly "*Cachrys* L.", "*Hippomarathrum* Link", and also *Heptaptera* Margot & Reuter (= *Colladonia* Boiss.). A list of authors with different concepts of these genera has been published elsewhere (Gruenberg-Fertig & al. 1973). Part of the present study has been devoted to the delimitation of the genus *Prangos*.

Arguments for the separate generic status of *Heptaptera* and "*Hippomarathrum*" have been published previously (Herrnstadt & Heyn 1971 and 1975a, respectively). A study of native populations proved that *Prangos* and "*Cachrys*" should be considered as a single genus (Herrnstadt & Heyn 1975b). However, further complications have their source in some nomenclatural problems: these are caused mainly by the mixed concept of the monotypic Linnaean genus *Cachrys* (Linnaeus 1753) and the typification of *C. libanotis* L. either by an element referable to *Cachrys* sensu auct. or to *Hippomarathrum*.

At first we tended to reject the name *Cachrys* entirely and to consider the genus including both *Cachrys* and *Prangos* as *Prangos* (Herrnstadt & Heyn 1972). Following the typification of *Cachrys libanotis* L. (Gruenberg-Fertig & al. 1973) by a Burser specimen, the name *Cachrys* was used for the above genus and new combinations have been published (Herrnstadt & Heyn 1975a). Consequently, the generic name *Hippomarathrum* was proposed for conservation (Gruenberg-Fertig & al. 1974).

The rejection of this proposal by the Committee for Spermatophyta, dealing with the conservation of generic names, was based on its refusal to accept the above-mentioned typification of *Cachrys*. Complying with this, the genus, in its wider sense, has to be named *Prangos* and the new combinations published by us have to be treated as synonyms.

Special problems in the taxonomic study of Prangos

Up to the recent years, plant collections have been very scarce in the main centres of distribution of *Prangos*. This may explain the fact that, in many cases, sectors of the range of variation of single species have been described as separate taxa. Additional material seen by us resulted in the reduction of many binomials to synonyms. Even today specimens are not abundant for many *Prangos* species and often only one and the same collection is represented in different herbaria.

Herbarium specimens of *Prangos* are often rather unsatisfactory. Due to the big size of the plants, it is almost impossible to include all parts of diagnostic value in

a single herbarium sheet. In addition, specimens usually have been collected only with young fruit, although characteristic features may be discerned only in mature ones. The reason for this is that, because of their thickness, pressing of mature fruit causes many difficulties. This problem has been previously discussed by Townsend (1966).

Growing *Prangos* experimentally is rather difficult, if not impossible, due to a number of reasons:

- viable seeds are only rarely available. First, seeds are rather short-lived. In addition, the embryo often does not reach full development before the fruits become detached from the plant. It is, however, impossible to discern between mericarps with normal or undeveloped embryos because the endosperm occupies the main part of the volume of the mericarp. Fully developed embryos are often attacked by insects, especially by *Lygus* (Robinson 1954), which destroy the embryo;
- seedlings often tend to degenerate after their first stages of development.