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Kandaharia, a new genus of Umbelliferae from SE Afghanistan¹

REINO ALAVA

Résumé

Alava, R. (1976). Kandaharia, un nouveau genre d'Ombellifères du sud-est de l'Afghanistan. *Candollea* 31: 91-94. En anglais.

Ce genre nouvellement découvert et sa seule espèce connue, *Kandaharia rechingorum*, sont décrits sur la base de deux récoltes provenant des environs de Kandahar. Au sein de la sous-tribu des *Tordyliinae*, *Kandaharia* est comparé à *Stenotaenia*, seul autre genre qui possède des méricarpes à vallécules et face commissurale plurivittées.

Abstract

Alava, R. (1976). Kandaharia, a new genus of Umbelliferae from SE Afghanistan. *Candollea* 31: 91-94. French abstract.

This newly discovered genus and its single known species, *Kandaharia rechingorum*, are described from two gatherings from the surroundings of Kandahar. Within the subtribe *Tordyliinae*, *Kandaharia* is compared to *Stenotaenia*, the only other genus whose mericarps have plurivittate vallecule and commissural face.

During the course of investigating the genus *Zosima* Hoffm. for the "Flora Iranica" an unusual specimen (*Rechinger 34803*, collected in 1967 between Kandahar and Girishk in SE Afghanistan) was found among the rich material sent from the Naturhistorisches Museum Wien (W). Even though in habit it somewhat resembled *Zosima absinthifolia* (Vent.) Link, it did not agree in other characters to include it in that genus. Another specimen (*W 7642*, collected in 1969 also near Kandahar by I. Hedge, P. Wendelbo and L. Ekberg), sent with the *Zosimas* from the Royal Botanic Garden Edinburgh (E), was found to be conspecific with the Vienna specimen.

That they were not *Zosimas* became quite evident when a more careful study – especially of the floral and fruit characters – was made. *Zosima*, like most of the genera in the *Tordyliinae*, is known to have, among other distinctive characters, solitary oil canals in the vallecule as well as two oil canals on the commissural face of the mericarp. Both of the specimens, *Rechinger 34803* and *W 7642*, had multivittate vallecule and commissural face. This character excludes them from *Zosima* and from most of the other *Tordyliinae*. The genus *Stenotaenia* is the only one in the *Tordyliinae* known to have multivittate vallecule and commissural face. Comparison of our two specimens with the type specimens of the *Stenotaenia* species showed that, while agreeing in having multivittate vallecule and

¹Vorarbeiten zu K. H. Rechinger, Flora iranica, N° 20.

commissural face, they differed considerably in most of the other diagnostic characters. Some of the most pertinent characters are tabulated below:

	<i>Stenotaenia</i>	<i>Rechinger 34803, W 7642</i>
Habit	scapose high altitude plants coming to maturity late in the growing season;	strongly branching plants from much lower altitudes coming to maturity early in the growing season;
Cauline leaves	reduced almost entirely to sheaths;	well developed and similar to the basal leaves, though smaller;
Umbels	only terminal on the main axis, 3-radiate, rays unequal in length;	on both the main axis and lateral branches, multiradiate, rays equal to subequal in length;
Bracts and bracteoles	absent;	present;
Calyx margin	present, 5-dentate;	absent;
Fruit	ovate to elliptic-ovate;	oblong-suborbicular;
Mericaip	narrowly and slightly winged, margin weakly tumid.	broadly winged, with a thick tumid margin.

On the basis of these differences, as well as of other, perhaps less striking ones, it seems quite obvious that the specimens, *Rechinger 34803* and *W 7642*, represent an undescribed genus. The name *Kandaharia* has been chosen for it, as the plant seems (as far as we know now) to be restricted to the vicinity of Kandahar in SE Afghanistan.

Kandaharia Alava, **Gen. nov.** (subfam. *Apioideae*, trib. *Peucedaneae*, subtrib. *Tordyliinae*).

Typus et species unica: *Kandaharia rechingerorum*.

Planta perennis videtur. *Caulis* valde ramosus, striatus, retrorse hirsutus, basi cum collo residuis foliorum emortuorum obtectus. *Folia* bipinnatisecta. *Umbellae* multiradiatae, involucri involucellique phylla adsunt. *Flores* albi, calycis dentes obsoleti, petala non radiantia. *Fructus* a dorso valde compressus; mericarpia in alam latam dilatata et margine valde incrassata; valleculae et commissura multivittatae.

Kandaharia rechingerorum Alava, **spec. nova** (fig. 1-5).

Holotypus: *Rechinger 34803* (W).

Planta evidenter perennis, tota retrorse hirsuta. *Caulis* valde ramosus, teres, striatus, ad 45 cm altus, collo residuis foliorum emortuorum obtectus; rami laterales cauli principali aequilongi, plus minusve ascendentes. *Folia* basalia numerosa, 15-20 cm longa; petiolus 6-8 cm et lamina 9-12 cm longi; lamina bipinnatisecta, ambitu oblongo-lanceolata; folia caulina basalibus similia sed minora, vagina paulo membranaceo-ciliata parum evoluta. *Umbellae* decompositae, terminales, 5-13-radia-

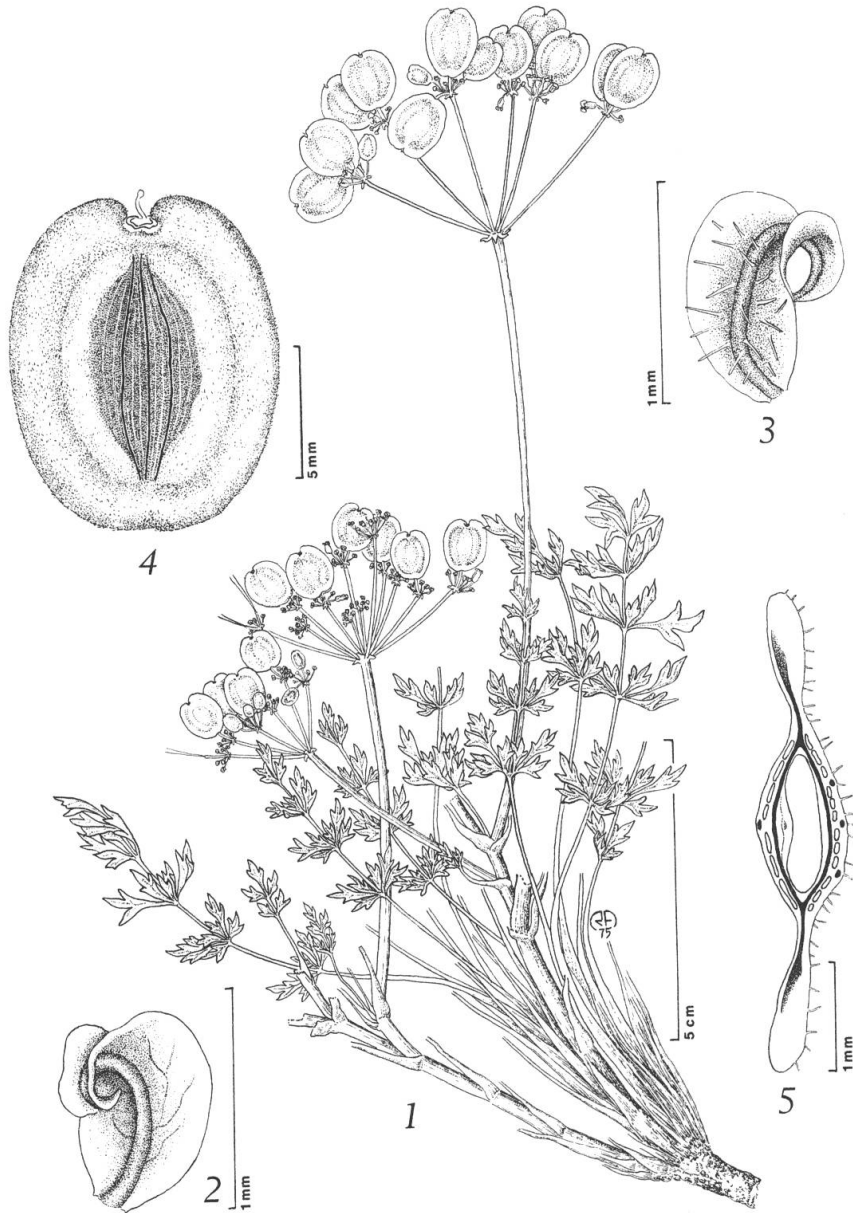


Fig. 1-5. — *Kandaharia rechingerorum* Alava:
 1, habit of the plant; 2, adaxial face of petal; 3, abaxial face of petal; 4, mature mericarp;
 5, cross section of mericarp (1, 4 and 5 drawn from the type; 2 and 3 from *W* 7642).

tae; radii retrorse scabriusculi, inter se aequilongi vel subaequilongi, in planta fructifera 1.2-4.5 cm longi; involucri involucellique phylla 5-10, parva, reflexa, margine membranacea et longe ciliata; umbellulae 15-20-florae; pedicelli fructiferi 2-3 mm longi. *Flores* hermaphroditi vel unisexuales; calycis dentes obsoleti; petala alba,

ovata vel obovata, lacinulâ inflexâ et costâ valde evolutâ, dorso pilis rigidis acutis obsita. *Fructus* a dorso valde compressus; mericarpia oblongo-suborbiculata, 10-12 mm longa et 8-10 mm lata, in alam latam dilatata et margine valde incrassata, facie abaxiali dense hirsuta; stylopodium late cyathiforme, margine undulato-crenatum; styli divergentes, saepe in fructibus maturis marcescentes; vittae dorsales in quaque valleculâ ternae, crassiusculae, totam valleculae latitudinem implentes, laterales abbreviatae; vittae commissurales 8, quatuor in quoque dimidio faciei commissuralis, Fructifera mense maio.

The plant seems to be monocarpic or perennial, but this fact can be established only when more material is available and after observations on the plant in the field. The stem is terete and striate with rather deep green grooves and relatively sharp ridges which are almost whitish in colour and are particularly noticeable on the lower internodes. It is up to 45 cm high and has a collar of dried petiolar remainders at the base; it is branching at the base and from the lower nodes. The branches are slightly ascending and are equal in length with the main axis. The whole plant is retrorse-hirsute. The basal leaves are numerous and their total length is 15-20 cm; the petioles are 6-8 cm long; the lamina is bipinnatisect and oblong-lanceolate in outline, 9-12 cm long. The cauline leaves are similar to the basal ones though smaller. The leaf sheaths are not inflated, their margin is slightly membranous and ciliate. The umbels are terminal on the main axis and on lateral branches, 5-13-radiate, with rays retrorse-scabrous, equal to subequal in length and 1.2-4.5 cm long in the fruiting stage. Bracts and bracteoles are present, 5-10 in number, reflexed and with membranous, long-ciliate margins. The umbellules have 15-20 non-radiating flowers. Hermaphrodite and unisexual flowers are present in the same umbellules. The calyx teeth are obsolete. The petals are white, ovate to obovate, with an inflexed apex and with a well developed mid-vein; their abaxial face is covered with rigid, sharp hairs. The fruit is strongly compressed dorsally, oblong-suborbicular, 8-10 mm long and 10-12 mm broad. The mericarps have a well developed wing and thick tumid margins, their abaxial face is densely hirsute. The fruiting pedicels are 2-3 mm long. The stylopodium is broadly cyathiform, with an undulate-crenate margin; the styles are divergent, often withering on the mature fruit. 3 dorsal vittae are present in each vallecule, rather thick and filling it all; the lateral ones are abbreviated at both ends. 8 commissural vittae are developed, four on each half of the commissural face. The fruiting time is in May.

Specimens seen: SE Afghanistan, Kandahar: in saxosis aridis 80 km W Kandahar, 31°36'N, 65°47'E, versus Girishk, 31°50'N, 64°35'E, alt. 1100 m, 21.5.-1967, *Rechinger 34803* (W!). Prov. Kandahar: hill to the west of Kandahar, S of Arghandab bridge, stony slopes, alt. c. 1200 m., 7.5.1969, *Hedge, Wendelbo & Ekberg W 7642* (E!, GB!).

The species is named in honour of Prof. and Mrs. K. H. Rechinger of Vienna in appreciation of their outstanding contributions to the knowledge of the flora of South West Asia.

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