

NOTES FROM THE  
ROYAL BOTANIC GARDEN  
EDINBURGH

VOLUME XXV · No. 2 · 1964

TWO NEW ARISTOLOCHIAS FROM TURKEY

P. H. DAVIS & M. S. KHAN

Since we published our revision of *Aristolochia* in the Near East (Notes Roy. Bot. Gard. Edinb. 23, 515-546: 1961), a beautiful collection of Turkish specimens (accompanied by the loan of colour transparencies of the same plants) has been donated to the Edinburgh herbarium by Mr. K. M. Guichard. Among these are the two new species from Anatolia described below.

*Aristolochia guichardii* P. H. Davis & M. S. Khan, *spec. nov.* Pl. 3, A.

Affinis *A. billardieri* Jaub. & Spach et *A. brevilabris* Bornm. sed ab ambabus limbo perigonii auriculato distinguitur; insuper a priori limbo perigonii latiore et brevior intra hirsuto, colore diverso recedit; ab altera mucrone perigonii non reflexo differt.

*Radix* lignosa, cylindrica, verticalis, circa 1.5 cm. crassa. *Caules* simplices vel parce ramosi e basi 20-30 cm. longi, tennes, non ultra 2 mm. crassi, flexuosi, sulcati, parce hirtelli, sub terra filiformes squamosi. *Folia* cordato-ovata, mediana 3.5-5.5 cm. × 3-5 cm., integra, tenuia, obtusa vel emarginata, raro mucronata, superne parce et breviter hirtella, inferne pallidiora dense hirtella, basi sinu amplo cordato raro angusto, auriculis late rotundatis latitudine longitudinem plus minus aequante; petiolus 1-3 cm. longus, tenuis. *Pedicelli* pubescentes ad 2 cm. longi. *Flores* solitarii, axillares; perigonium ambitu 2-3.5 cm. longum extra olivaceum hirtellum; utriculus oblongus, 0.7-1 cm. × 0.4-0.6 cm., intra superne hirsutus; tubus tenuis sigmoideo-curvatus ad basin circa 2 mm. latus superne sensim ampliatus ad 7 mm. latus, intus glaber; limbus late cordatus vel rotundatus, intus rubro-purpureus dense hirsutus, c. 1.2 cm. longus et latus, basi breviter auriculatus sinu c. 2 mm. profundo, apice breviter mucronatus non reflexus, lateribus saepe incurvis. *Ovarium* clavatum hirsutum. *Fructus* ignotus. Fl. Apr.

TURKEY. Prov. Muğla (Caria): Ula, 610 m. to nearly sea level, shade of bushes, flowers maroon, very common, 16 Apr. 1962, K. M. Guichard TUR/52/1962 (holo. E, iso. K).

*A. guichardii* is most closely related to *A. billardieri* Jaub. & Spach

which extends from N. Palestine to the Cilician Taurus) and the little-known *A. brevilabris* Bornm. from the Amanus, resembling both in leaf shape and habit. It differs from both its allies in having an auriculate perianth limb that is broader and shorter than that of *A. billardieri*, very hairy inside and of a different colour; the limb lacks the reflexed mucro of *A. brevilabris*. The shape of the perianth resembles that of *A. hirta* which is quite common in west Anatolia and the neighbouring islands, but the flowers are much smaller, with a bilobed base to the limb, and the leaves are cordate-ovate instead of narrowly deltoid with a cordate base.

***Aristolochia samsunensis* P. H. Davis, sp. nov. Pl. 3, B.**

Affinis *A. bodamae* Dingler et *A. hirtae* L. sed ab ambabus foliis pro proportione latoribus, caulibus ad medium floriferis, floribus duplo minoribus recedit; insuper ab *A. hirta* limbo perigonio biauriculato differt.

*Radix* ignota, verisimiliter cylindrica. *Caules* simplices, erecti, etiam ad medium floriferi, supra terram 30–40 cm. alti, sulcati, hirtelli, sub terra parce squamosi. *Folia* late deltoidea (lateribus rectis), mediana 5–7 cm.  $\times$  4–7 cm., obtusa, apice saepe emarginata et mucronulata, utrinque hirtella, basi sinu amplo cordato auriculis rotundatis incurvis proviso; petiolus 5–10 mm. longus. *Flores* (2–) 3–5, solitarii, axillares; perigonium ambitu 5–5.5 cm. longum, extra griseo-olivaceum, hirtellum; utriculus breviter oblongus, 8–10 mm.  $\times$  6–7 mm.; tubus sigmoideo-curvedus, ad basin 3–4 mm. latus, superne sensim ampliatus, infra limbum 6–8 mm. latus, intra ex toto pilis brevibus flexis obsitus, supra utriculum pallidus sed caeterum purpureus; limbus expansus ovato-rotundatus, 22–30 mm.  $\times$  c. 20 mm., apice subemarginata, basi breviter bilobata sinu ad 4 mm. profundo, intus ex toto breviter albo-hirsutus, superne et ad peripheram virescens purpureo-maculatus, caeterum atropurpureus. *Ovarium* clavatum, dense hirtellum. *Fructus* immaturus obovatus. Fl. Maio. PROV. SAMSUN: near Samsun, 15 m., wheatfields, massive root-stock 1 ft. deep, 12 May 1962, Guichard TUR/86/1962 (holo. E, iso. K).

The new species is closely related to both *A. hirta* L. and *A. bodamae* Dingler but differs from both in having broadly deltoid leaves as broad as long, more numerous flowers (usually 3–5 instead of 1–3) that are only half as large as its allies, and borne higher up the stem. In having an auricled perianth limb it comes closer to *A. bodamae* than to *A. hirta*, but grows farther east than *A. bodamae* as the latter's range (from Thrace to central Paphlagonia) is at present known. *A. samsunensis* is the small-flowered plant referred to in our revision (p. 527) as probably representing (on the basis of Guichard's photograph) a new species: the locality, cited as "Ergiz in Turkish Lazistan", should have read "Engiz near Samsun". Mr. Guichard was impressed in the field with the distinctness of the Samsun *Aristolochia* from *A. bodamae* (both of which he has photographed in colour), and further study of his recent collection confirms this opinion.

Mr. Guichard's colour transparencies allow comparisons to be made between the perianth of *A. hirta* and that of the closely allied *A. bodamae* to which we have assigned material from N. Anatolia. In the two transparencies available of *A. hirta* (representing Davis 25518\* and Guichard TUR/8/1962), the perianth limb is suborbicular, entire or emarginate at

\* A photograph of this plant appeared in J. Roy. Hort. Soc. 82, fig. 49 (1957).

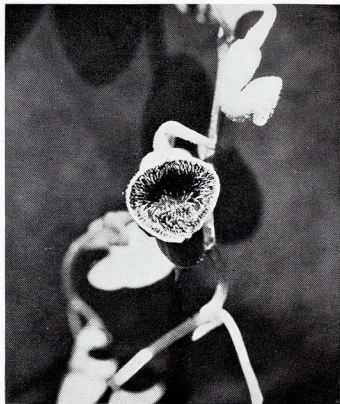


PLATE 3a.  
A. *Aristolochia guichardii* (TUR/52/62).  $\times 1.8$

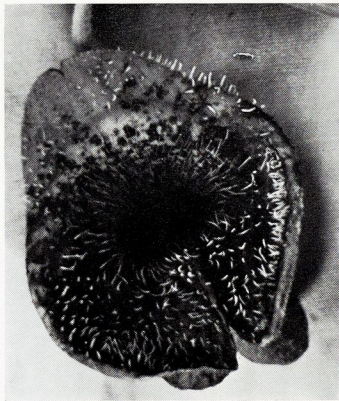


PLATE 3b.  
B. *A. samsunensis* (TUR/86/62).  $\times 4$



PLATE 4a.

A. *Aristolochia pontica* (TUR/84/62).  $\times 1.5$

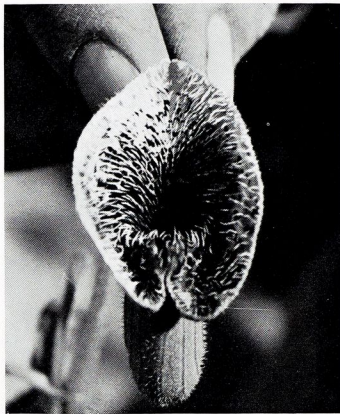


PLATE 4b.

B. *A. bodamae* (TUR/78/62).  $\times 2$

the base and incurved at the sides, the lower part of it being brown and glabrous inside and the rest of it covered with long white hairs on the inner surface; the upper part of the limb is maroon or faintly mottled with green on a maroon ground. The perianth limb of *A. bodamae* (as represented by Guichard's specimens from the provinces of Bursa and Muğla) is ovate and spreading, manifestly bilobed at base, and covered all over the inner surface with shorter hairs; it is maroon in the centre but mottled and pale green towards the margin and in its upper part, as in *A. samsunensis*. However, in both *A. hirta* and *A. bodamae* the flowers show considerable variation in colour, hairiness and degree of lobing. As the differences in leaf shape claimed in our revision do not hold, the taxa can only be separated on the basis of rather variable floral characters which are difficult to observe in herbarium material. Population studies may reveal that *A. bodamae* would be better treated as a subspecies of *A. hirta*, but for the present we retain it at specific status.

The following new Anatolian specimens (supplemented by colour transparencies) can be attributed to *A. bodamae*.

PROV. BURSA: Yenişehir—Iznik road, fallow field, 30 April 1962, *Guichard* TUR/80/1962; Bursa—İnegöl road, a few km. E. of Bursa, 60 m., in the open near a solitary oak beside a dry stony wadi bed, soil light and sandy, root a massive thing with finger-like tubers, 30 April 1962, *Guichard* TUR/78/1962. PROV. MUĞLA: Bozdoğan to Muğla, beginning of ascent of Bozdoğan—Kavaklıdere road (near Çay hut), 60 m., shady bank of small orchard, flowers deep maroon and yellowish, 23 April 1962, *Guichard* TUR/72/1962.

The Muğla gathering (No. 72) is within the area of typical *A. hirta*, but matches the N. Anatolian material of *A. bodamae*. Guichard's specimens from the Bursa province suggest that the gatherings from this area which we referred to *A. hirta* in our revision may in fact represent *A. bodamae*.

The following related species are represented in Guichard's recent material.

*A. hirta* L. PROV. ANTALYA: Finike—Kaş road, c. 150 m., edge of wheatfield and in shade of bushes, oak woods, flowers deep maroon, root cylindrical, *Guichard* TUR/8/1962.

*A. pontica* Lam. PROV. SAMSUN: near Engiz, edge of ploughed field above stream, 100 yards from sea, 13 May 1962, *Guichard* TUR/84/1962.—The photograph shows the perianth limb to be ovate and deeply auriculate below, palely olivaceous round the margin, surrounding a whitish central zone which becomes heavily mottled with maroon towards the throat; the lower limb is brownish pink and bears long pinkish hairs towards the throat. The outside of the tube is olivaceous below, becoming pale brownish pink above—a similar colouration to that found in *A. hirta*, *A. bodamae*, *A. guichardii* and probably other species.