Taxonomic Notes for Salvia aucheri (Lamiaceae) from Southern Anatolia, Turkey

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ABSTRACT. Salvia aucheri Benth. (Lamiaceae) is a species endemic to Turkey, and the name is lectotypified herein. Two varieties were previously recognized, as S. aucheri var. aucheri and S. aucheri var. canescens Boiss. & Heldr.; the infraspecific taxa are recognized here as subspecies. During revisionary work on Turkish Salvia L., we determined that S. aucheri subsp. canescens (Boiss. & Heldr.) Celep, Kahraman & Doğan differs from subspecies aucheri not only morphologically, but also geographically and phenologically, and both taxa are typically allopatric. Key words: Lamiaceae, Salvia, Turkey.

The genus Salvia L. (Lamiaceae) was first treated for Turkey by Hedge (1982) in Davis's Flora of Turkey and the East Aegean Islands, in which 86 species were recognized. Since 2005, extensive field surveys and laboratory studies have been conducted on Salvia in Turkey by the authors (Celep & Doğan, 2009; Celep et al., 2009; Ilcim et al., 2009; Kahraman et al., 2009). Among these species, S. aucheri Benth. is endemic to Turkey, and its dried leaves are commonly consumed locally as an herbal tea (Celep, pers. obs.).

Salvia aucheri was first collected from Cilicia (the eastern Mediterranean region of Turkey) by Gustave Coquebert de Montbret. Specimens of novelties for the Lamiaceae were generally stated to be at Montbret's herbarium at the Royal Botanic Gardens, Kew (Bentham, 1836: 37). Bentham subsequently described S. aucheri as a new species (1836: 38), noting the type as only "Hab. in Ciliciâ." One collection by de Montbret (1534) was found at Kew from the Turkish location of Cilicia, and this collection can be accepted as type material for S. aucheri. Because Bentham did not specify a particular collection, the name is lectotypified herein.

In contrast to Salvia aucheri from the eastern Mediterranean region, the type of S. aucheri var. canescens Boiss. & Heldr. was collected from Pinarbaşı in the central portion of the Mediterranean region of Turkey in 1845 and described by Boissier and Heldreich in 1879. In the Turkish account for Salvia by I. C. Hedge (1982), variety canescens was

accepted as a local endemic within *S. aucheri*, similar to Boissier and Heldreich's 1879 treatment. Three other previously accepted varieties of the species (*S. aucheri* var. amethystea Emb. & Maire, *S. aucheri* var. aurasiaca Maire, and *S. aucheri* var. mesatlantica Maire) were later transferred to the North African species *S. blancoana* Webb & Heldr. ex Walp. (Figuerola, 1987; Figuerola et al., 1990).

Since 2005, the authors have carried out extensive field studies, collecting Salvia aucheri across its distributional range. These specimens were crosschecked with material housed at various herbaria (ANK, BM, E, G, GAZI, HUB, ISTE, and K). These field and herbarium studies demonstrate that the infraspecific taxa of S. aucheri are closely related, but differ at the subspecies level (Table 1). The taxa also differ in terms of their geographic distribution and phenology. Salvia aucheri and its subspecies canescens are both known from the Mediterranean region of Turkey, but according to Davis's grid system (1965), the former is distributed across the C5 and C6 grid squares while the latter is known only from the C4 grid square. Our field studies are also consistent with the Flora of Turkey (Hedge, 1982) and Flora Orientalis (Boissier, 1879).

Flowering of Salvia aucheri subsp. canescens occurs in June(–July); however, flowering of subspecies aucheri occurs for a longer interval, from June to August(–October) (Hedge, 1982; Celep, pers. obs.). Because of the morphological, chorological, and phenological differences, the taxa should be distinguished at the subspecies level.

Salvia aucheri Benth., Ann. Sci. Nat., Bot., ser. 2,
 38: 1836. TYPE: Turkey. "Hab. in Ciliciâ" [C5, Adana/Mersin, E Mediterranean region of Turkey], s.d. [1836], G. Coquebert de Montbret 1534 (lectotype, designated here, K).

la. Salvia aucheri subsp. aucheri.

Specimens examined. TURKEY. **C5:** Adana: Karsantı, E. Yurdakul 41 (ANK); Pozantı, Gülek pass, W. Siehe 665 (E); Gülek, P. H. Davis 16476 (ANK); Pozantı, ca. Gülek Boğazı, G. Akaydın & F. Celep 980 (ANK); Pozantı to

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Table 1. Diagnostic morphological characters of Salvia aucheri subsp. aucheri and S. aucheri subsp. canescens.

	subsp. aucheri	subsp. canescens
Stem length (cm)	45-110	15-70
Leaves	simple or occasionally with one pair of lateral lobes	always simple
Leaf shape	oblong, elliptic to ovate-elliptic	linear-elliptic to elliptic
Leaf dimensions (cm)	(1.4-)4-13.5 × $(1-)2-6$	1-3.5(-4.5) × 0.4-1.6
Calyx length (mm)	6-10	4-6(-7)
Corolla color	whitish to light blue	pinkish to lilac
Corolla length (mm)	20-35(-40)	15-23

Akçatekir Kasabası, F. Celep 1574 (ANK); Thyanitis, W. Siehe 888 (K). Mersin: Çamlıyayla (Namrun), Pozantı to Çamlıyayla, Kadıncık valley, F. Celep 1570 (ANK); Çamlıyayla, ca. Sarıkavak village, Z. Aytaç 7026 et al. (GAZI); Tekir, A. Huber-Morath 1031 (ANK). Niğde: Ulukışla, Aksaray to Adana, J. Darrah 230 (E); Çiftehan, Bolkar Mtn., Alihoca village, F. Celep 1359. C6: Osmaniye: Amanos Mtn., Y. Akman 3029 (ANK); Gaziantep to Osmaniye 100 km, N. & M. Tanker & E. Sezik (ISTE 8302).

1b. Salvia aucheri subsp. canescens (Boiss. & Heldr.) Celep, Kahraman & Doğan, stat. nov. Basionym: Salvia aucheri var. canescens Boiss. & Heldr., Fl. Orient. 4: 593. 1875. Salvia ermenekensis Rech. f., Oesterr. Bot. Z. 95: 423. 1949. TYPE: Turkey. C4 Konya: "ad Bounarbachi [Pinarbasi] et in valle Djoksu [Göksu] inter Karaman et Ermenek," 25 June 1845, Theodor von Heldreich 951 (holotype, G).

Specimens examined. TURKEY. C4: Karaman: 5 km S of Karaman, J. Archibald 6789 (E); Ermenek, Balkusan (fr.) P. H. Davis 16196 (ANK); betw. Ermenek & Mut, E. Tuzlacı (ISTE 45135); Ermenek, Kazancı village, E. Tuzlacı (ISTE 45221); Mut to Ermenek, 25 km before Ermenek, Çamlıca village to Damlaçal, G. Akaydın & F. Celep 994 (ANK); Ermenek, Mut to Ermenek, 1.5–2 km before Ermenek, G. Akaydın & F. Celep 999 (ANK); Mut to Ermenek, 39 km

before Ermenek, F. Celep 1245 (ANK); above Boyalı village, A. Güner 12664 (GAZI); Sarıveliler to Ermenek 4 km, Z. Aytaç 7580 et al. (GAZI). Içel: 1 km NE of Gülnar, A. Huber-Morath 9587 (E).

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