

## CONTRIBUTIONS TO THE STUDY OF TURKISH GRASSES, II

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**ABSTRACT.** The following new taxa are described: *Crypsis birandiana* M. Doğan, *Gaudinopsis macra* (M. Bieb.) Eig subsp. *antalyensis* M. Doğan, and *Alopecurus myosuroides* Hudson var. *latialatus* M. Doğan. New combinations are published in *Agrostis*, *Aira*, *Alopecurus*, *Phleum* and *Rostraria*. In addition *Koeleria pyramidata* (Lam.) Beauv., a species new to Turkey, is recorded.

### ***Crypsis birandiana* M. Doğan, sp. nov. Fig. 1.**

Affinis *Crypsis acuminatae* Trin. sed panicula latiore, spiculis longioribus, glumis longioribus, aristis glumarum longioribus, lemmate longiore, arista lemmate longiore differt.

Herba annua. Culmi 6-42 cm alti, inferne plus minusve geniculato-ascendentes, plerumque 3-nodati, glabri. Laminae 2-6 × 1-2 mm, lineares, acuminatae, ± glaucae, in superficiebus ambabus hirsutae. Panicula 1-5.2 cm × 6-8 mm, plerumque oblonga, gradatim decrescens. Spiculae 4.5-5 mm (aristis inclusis), uniflorae, lateraliter compressae. Glumae 1-nervosae, subaequales, lanceolatae, acuminatae, terminaliter aristatae. Gluma inferior 3.5-4.2 mm (arista inclusa); arista 1-2 mm longa. Gluma superior 4.2-5 mm longa (arista inclusa); arista 1.8-2 mm longa. Lemma 1-nervosum, 4.5-5 mm longum; arista 0.8-1.2 mm longa. Palea binervosa. Rhachilla infra glumas disarticulans. Stamina 3. Antherae 2-2.5 mm longa. Fl. Aug.-Sept. *Dry grassy patch in oak scrub, 1200 m.*

Typus. [Turkey B8 Bingöl] 11 km W-lich Solhan an der Strasse nach Bingöl, 1200 m, K. P. Buttler 15968 (holo. Herb. Buttler).

E Anatolia, N Iraq.

This species also occurs in N Iraq (Sarsang, R. Wheeler & W. Haines 1589, 1591a). It has been named after the late Prof. Dr Hikmet Birand of Ankara University, a distinguished Turkish botanist to whom I shall always be most grateful, in acknowledgement of his immense contributions to Turkish botany.

### ***Gaudinopsis macra* (M. Bieb.) Eig subsp. *antalyensis* M. Doğan, subsp. nov.**

A typo specie culmis, spiculis, glumis, lemmate, arista brevior differt.

Culmi 7-13 cm longa. Spiculae 6-8 mm longae. Gluma inferior 3-3.5 mm longa. Gluma superior 4-4.5 mm longa. Lemma 4.5-5 mm longum. Arista 3.5-7 mm longa. Fl. Jun.-Jul. *Rocky slopes, 800-1350 m.* Typus. [Turkey C3 Antalya] 15 km südlich Korkuteli in Richtung Elmali, stark von Ziegen beweidetes Odland, 1350 m, 4 vii 1973, F. Holtz, P. Hansel & T. Kesercioğlu 494 (holo. E).

TURKEY. B2 Burdur: 51 km N of Fethiye, Altinyayla, 100 m, *Hub.-Mor.* 5546. C3 Antalya: 6 km from Elmali to Korkuteli, R. Alava & G. Bocquet 5256; 3 km S of Hafızpaşa, 800 m, *Hub.-Mor.* 5547.

Local endemic. E Mediterranean element.

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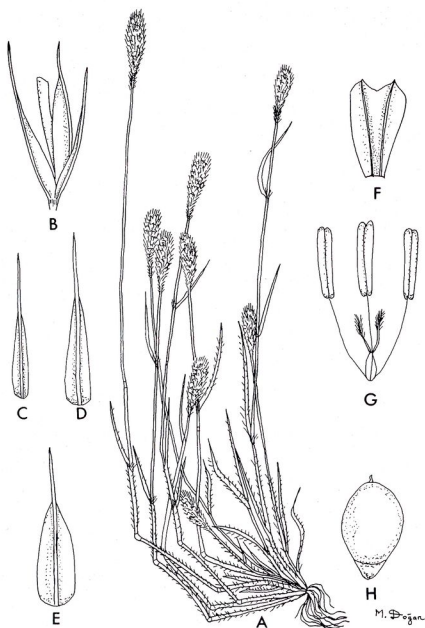


FIG. 1. *Crypsis birandiana*: A, habit; B, spikelet; C, lower glume; D, upper glume; E, lemma; F, palea; G, flower; H, caryopsis. A  $\times \frac{1}{2}$ , B–G  $\times 6$ , H  $\times 13$ .

This new subspecies is a local endemic in SW Anatolia and is described on the basis of a few specimens which were collected mainly within the city boundaries of Antalya. It differs from the type subspecies of *Gaudinopsis macra* on a number of characters which are tabulated below.

|              | <b>subsp. macra</b> | <b>subsp. antalyensis</b> |
|--------------|---------------------|---------------------------|
| Stem         | to 43 cm            | 7–13 cm                   |
| Spikelet     | 8–17 mm             | 6–8 mm                    |
| Lower glume  | 4–6.5 mm            | 3–3.5 mm                  |
| Upper glume  | 5–7 mm              | 4–4.5 mm                  |
| Lemma        | 5–7.5 mm            | 4.5–5 mm                  |
| Awn of lemma | 7–10 mm             | 3.5–7 mm                  |

***Alopercurus myosuroides* Hudson var. *latialatus* M. Doğan, var. nov.**

Affinis *Alopecurus myosuroides* var. *breviaristatus* [Marchesetti ex] Asch. & Graebn. sed ala glumarum eas subaequant.

Typus. [Turkey C5 Adana] Adana to Karataş, 5 km S of Adana, 1 v 1965, Coode & Jones 258 (holo. E).

This new variety is known only from the type specimen. It differs from var. *breviaristatus* in its longer awn (almost as long as the glume itself) and wider glume-wing (at least 1 mm) but is certainly closer to this variety than to the type variety of the species.

#### NEW COMBINATIONS

***Agrostis capillaris* L. var. *aristata* (Boiss.) M. Doğan, comb. et stat. nov.**

Syn.: *Agrostis vulgaris* With. var. *aristata* Boiss., Fl. Or. 5: 515 (1884).

***Aira elegantissima* Schur subsp. *ambigua* (De Not.) M. Doğan, comb. nov.**

Syn.: *Aira ambigua* De Notaris in Ann. Sci. Nat. Sér. 3, 5: 365 (1846).

***Alopercurus gerardii* Vill. var. *cassius* (Boiss.) M. Doğan, comb. et stat. nov.**

Syn.: *Alopercurus cassius* Boiss., Diagn. Ser. 1(13): 41 (1853).

***Phleum exeratum* Griseb. subsp. *aegaeum* (Vierh.) M. Doğan, comb. nov.**

Syn.: *Phleum arenarium* L. subsp. *aegaeum* Vierh. in Verh. Zool.-Bot. Ges. Wien 69: 304 (1919).

***Rostraria hispida* (Savi) M. Doğan, comb. et stat. nov.**

Syn.: *Festuca hispida* Savi, Fl. Pis. 1: 117 (1798).

***Rostraria obtusiflora* (Boiss.) Holub subsp. *amblyantha* (Boiss.) M. Doğan, comb. et stat. nov.**

Syn.: *Koeleria phleoides* (Vill.) Pers. var. *amblyantha* Boiss., Diagn. Ser. 2(4): 134 (1859).

## NEW RECORD FOR TURKEY

**Koeleria pyramidata** (Lam.) Beauv.

B7 Erzincan: Between Horosan and Karaorgan, 2000 m, *Davis* 30727 (E).

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