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ON THREE FORGOTTEN SPECIFIC NAMES
OF EUPHORBIA L. (EUPHORBIACEAE)
FROM THE CAUCASUS

Lectotypes and a neotype have been selected for three forgotten *Euphorbia* L. names described from the Caucasus: *E. chimaera* Lipsky var. *kimmerica* Lipsky, *E. densiflora* K. Koch and *E. repens* K. Koch. These names are synonymized with *E. sareptana* A. Beck., *E. stricta* L. and *E. virgata* Waldst. et Kit. respectively.

Euphorbia, taxonomy, lectotype, neotype, Caucasus

Գեղման Դ. Վ. Կոպկասից նկարագրված *Euphorbia* L. (*Euphorbiaceae*) ցեղի երեք մոռացված տեսակների անվանումների մասին: Ընտրված են Կոպկասից նկարագրված *Euphorbia* ցեղի երեք մոռացված անվանումների լեկտոտիպներն ու նեոտիպը. *E. chimaera* Lipsky var. *kimmerica* Lipsky, *E. densiflora* K. Koch, *E. repens* K. Koch. Այս անվանումները դարձվել են սինոնիմներ համապատասխանաբար *E. sareptana* A. Beck., *E. stricta* L., *E. virgata* Waldst. et Kit.

Euphorbia, կարգաբանություն, լեկտոտիպ, նեոտիպ, Կովկաս

Гельтман Д. В. О трех забытых видовых названиях *Euphorbia* L. (*Euphorbiaceae*), описанных с Кавказа. Лектотипы и неотип выбраны для трех забытых видовых названий рода *Euphorbia*, описанных с Кавказа: *E. chimaera* Lipsky var. *kimmerica* Lipsky, *E. densiflora* K. Koch and *E. repens* K. Koch. Эти названия синонимизированы соответственно с *E. sareptana* A. Beck., *E. stricta* L. и *E. virgata* Waldst. et Kit.

Euphorbia, таксономия, лектотип, неотип, Кавказ

While working on the comprehensive checklist of *Euphorbia* L. subgenus *Esula* Pers. (*Euphorbiaceae*), my colleague Paul Berry drew my attention to three specific names described from the Caucasus: *E. kimmerica* (Lipsky) Grossh., *E. densiflora* K. Koch and *E. repens* K. Koch. They were registered in the World Euphorbiaceae Checklist (Govaerts et al., 2000) and in its updated Internet version, but were neither accepted nor synonymized in the recent checklists of regional floras, and taxonomic papers. The aim of this paper is to provide a formal typification and to clarify the status of these names.

Typification and discussion

Euphorbia chimaera Lipsky var. *kimmerica* Lipsky, Trudy Tifl. Bot. Sada, 4: 444 (1899) *E. kimmerica* (Lipsky) Grossh., Fl. Kavkaza, 3: 39 (1932).

Lectotype (designated here): [Caucasus] Chernomorsky okrug [Black Sea District], Novorossiysk, 18 V 1892, V. Lipsky s.n. (LE).

The basionym of *E. kimmerica* is *E. chimaera* Lipsky var. *kimmerica* Lipsky, which was published simultaneously with *E. chimaera* (Lipsky, 1899). The latter name is a synonym of *E. sareptana* A. Beck., which is distributed in the steppes of south European Russia, the Ukraine, and the northern Caucasus (Geltman, 1998). *Euphorbia kimmerica* should also be treated as a synonym of *E. sareptana*.

Euphorbia densifolia K. Koch, Linnaea, 21: 722 (1849).

Lectotype (designated here): Caucasus, Wilhelms s.n. (LE).

This species was described by Koch (1849) from Georgia using Wilhelms material ("aus Grusien von Wilhelms erhalten"). The original material which was likely represented

by the specimen sent from Wilhelms to Koch (B) was most likely destroyed. A duplicate kept in LE is designated here as the lectotype.

Euphorbia densifolia is a synonym of *E. stricta* L. Boissier (1862, 1879) placed in a group of obscure species and suggested that it is close to *E. stricta* ("An *E. stricta*"), but did not make any formal synonymization.

Euphorbia repens K. Koch, Linnaea, 21: 728 (1849) *Tithymalus repens* (K. Koch) Klotzsch & Garcke, Abh. Königl. Akad. Wiss. Berlin 1859: 96 (1860).

Neotype (designated here): [Armenia], Ararat district, grassy slopes in the vicinity of Lake Karakhar, 1750—1950 m, northern slope, B. Manakyan s.n., 18 VI 1977 (LE, iso. ERE).

Unfortunately Koch (1849) did not cite any material when he described this species. He placed it between *E. lucida* Waldst. et Kit. and *E. virgata* Waldst. et Kit. It is quite probable that Koch's "*E. lucida*" belongs in fact to *E. iberica* Boiss., a very common Caucasian species. According to Koch's description, *E. repens* has linear-oblong or linear-lanceolate leaves, characters which are very similar to *E. virgata*. Such individuals (usually they have also wider leaves) are found amongst *E. virgata* and could represent the result of occasional introgression with *E. iberica*. For these reasons, *E. repens* is treated here as a synonym of a broadly defined *E. virgata*.

I cannot find any specimens of the original material of *E. repens*, although there are some of Koch's duplicates of *E. virgata* in LE. Therefore, the selection of a neotype is required. The proposed neotype fits the original description and was collected in the area which was visited by Koch during his trip to the Caucasus and Asia Minor.

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