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NOTHOSCHKUHRIA, A NEW SOUTH AMERICAN GENUS FOR *SCHKUHRIA DEGENERICA* (COMPOSITAE, BAHIEAE)

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ABSTRACT

Nothoschkuhria B.G. Baldwin, **gen. nov.**, is based on *Schkuhria degenerica* (Kuntze) R.E. Fr., now treated as **Nothoschkuhria degenerica** (Kuntze) B.G. Baldwin, **comb. nov.**, of dry highlands in Bolivia and northern Argentina. Morphologically, the monotypic *Nothoschkuhria* differs in part from all other genera of Bahieae (including *Schkuhria* Roth) by a combination of annual habit, non-impressed glandular foliage, strictly alternate and bi- or tri-ternately parted leaves, discoid heads with 30+ florets, narrowly obpyramidal cypselae that are more densely strigulose proximally than distally, and pappi of 8 scales. Molecular phylogenetic data for Bahieae corroborate C.B. Heiser's suggestion that the taxon treated here as *Nothoschkuhria* is more closely related to *Bahia* Lag. than to *Schkuhria*. Treatment of *Nothoschkuhria* and *Bahia* in a monophyletic genus would require expanding the circumscription of *Bahia* to include other, more disparate genera.

Molecular phylogenetic analyses of Bahieae (Compositae, Heliantheae alliance) including representatives of more taxa than were studied by Baldwin et al. (2002) have revealed that *Schkuhria* Roth as circumscribed in recent treatments is polyphyletic (B.G. Baldwin & K.R. Wood, in prep.). Based on those findings, the South American *S. degenerica* (Kuntze) R.E. Fr. represents a separate lineage that does not constitute a monophyletic group with typical members of *Schkuhria* to the exclusion of other genera of the mostly southwestern North American "*Bahia* clade" (Baldwin et al. 2002) and additional genera not sampled in previously published phylogenetic studies (B.G. Baldwin & K.R. Wood, in prep.). Those findings and morphological considerations warrant treatment of *S. degenerica* in a genus distinct from others in Bahieae.

NOTHOSCHKUHRIA B.G. Baldwin, **gen. nov.** **TYPE**: *Nothoschkuhria degenerica* (Kuntze) B.G. Baldwin.

From other genera of Bahieae, *Nothoschkuhria* differs by the combination of annual habit, foliage with non-impressed glands, leaves strictly alternate and with blades bi- or tri-ternately parted, heads discoid, florets 30+ florets, cypselae narrowly obpyramidal and more densely strigulose proximally than distally, and pappi of 8 scales.

Annuals, decumbent to erect, 1–4 dm tall, openly branched from base or distally, foliage hispid-hirsute and stipitate- and sessile-glandular, the glands not impressed. **Leaves** alternate throughout, proximals petioled, petioles to 5 cm long, blades mostly bi- or tri-ternately parted, blades usually ovate to cordate in outline, 5–25 mm long, ultimate lobes linear, usually < 1 mm wide. **Capitulescences** open, paniculiform, peduncles 5–20 mm long. **Heads** discoid. **Involucres** obconic to turbinate, < 1 cm diam. **Phyllaries** 5–7, in ± 1 series, subequal, narrowly to broadly obovate, herbaceous, margins scarious, at least apically, apices yellow or reddish, abaxial faces stipitate- and sessile-glandular, the glands not impressed. **Receptacles** epaleate. **Florets** bisexual, fertile, ca. 30–40, corollas yellow, sometimes red-tipped, ca. 2–3 mm long, tubes shorter than or equaling narrowly funnelform throats, lobes 5, deltate. **Cypselae** black, narrowly obpyramidal, 4-angled, black,

strigulose, more densely proximally, especially on angles, 3–5 mm long; pappi of 8 persistent, elliptic to oblanceolate or spatulate, basally and medially thickened, laterally scarious, maroon to reddish-purple flecked scales, ca. 2 mm long, the alternate ones aristate, aristae ca. 0.5–1 mm long.

The name *Nothoschkuhria* reflects past misassociation of this taxon with *Schkuhria*. In his revision of *Schkuhria*, Heiser (1945) retained *S. degenerica* in *Schkuhria* but noted that all species except those later treated by Turner (1995) in a broadly circumscribed *S. pinnata* (Lam.) Kuntze ex Thell. were not "true Schkuhrias" and were more closely related to taxa of *Bahia* Lag. Based on molecular phylogenetic data (B.G. Baldwin & K.R. Wood, in prep.), *Nothoschkuhria degenerica* (≡ *S. degenerica*) is evidently more closely related to *Bahia* than to *Schkuhria* sensu stricto, as Heiser suggested. Treating *Bahia* and *Nothoschkuhria* together in a monophyletic genus would require expanding the circumscription of *Bahia* to include other morphologically distinct genera of the "*Bahia* clade" sensu Baldwin et al. (2002) and more disparate genera not previously included within that clade (B.G. Baldwin & K.R. Wood, in prep.).

Nothoschkuhria contains only one species, which is known from dry highlands of Bolivia and northern Argentina, mostly from 2250 to 3770 m elevation. Flowering specimens examined were collected in March and April.

Nothoschkuhria degenerica (Kuntze) B.G. Baldwin, **comb. nov.** *Rothia degenerica* Kuntze, Revis. Gen. Pl. 3: 169. 1898. *Schkuhria degenerica* (Kuntze) R.E. Fr., Ark. Bot. 5: 22. 1906. **TYPE**: **BOLIVIA**. On the Rio Tapacari, 3000 m, 19 Mar 1892, *O. Kuntze s.n.* (holotype: NY, as image in JSTOR; isotype: B destroyed).

Heiser (1945) noted two earlier names, not validly published, in synonymy of *Schkuhria degenerica*: (1) *Schkuhria pusilla* Wedd. var. *major* Sch.Bip., Bull. Soc. Bot. France 12: 80. 1865; Linnaea 34: 529. 1866 (nomen nudum); (2) *Schkuhria oölepis* Sch.Bip., loc. cit. (nomen nudum).

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