

Nomenclatural notes on the genus *Anisopappus* Hook. & Arn. (Asteraceae, Inuleae)

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Anisopappus Hook & Arn, is a genus of Asteraceae (tribe Inuleae) present in southeast Asia, tropical and southern Africa, and Madagascar. In their outline of this genus, ORTIZ *et al.* (1996) proposed a revised taxonomic structure for this genus, with a reduction of the 40 species and 4 subspecies described up to that point (see especially WILD, 1964, 1980; LISOWSKI, 1986a, 1986b, 1988, 1989; ORTIZ & PAIVA, 1995) to 17 species and 10 subspecies. This proposal was subsequently followed by BEENTJE (2002) in his revision of the genus *Anisopappus* for the Flora of Tropical East Africa, although he noted the existence of a nomenclatural error in ORTIZ *et al.* (1996) regarding the names *A. davyi* S. Moore and *A. abercornensis* G. Tayl., for which the priority names are *A. pumilus* (Hiern) Wild and *A. anemonifolius* (DC.) G. Tayl., respectively, in accordance with Principle III (priority of publication) of the International Code of Botanical Nomenclature. In this article we propose the necessary nomenclatural modifications (the taxon numbering used corresponds to that of ORTIZ *et al.*, 1996) and also present an updated list of accepted names in this genus.

2. ***Anisopappus pumilus*** (Hiern) Wild in Kirkia 4: 65 (1964). (***A. davyi*** S. Moore in Ortiz *et al.*, 1996)

≡ *Sphacophyllum pumilum* Hiern, Cat. Afr. Pl. Welw. 1, 3: 573 (1898) [basion.]

≡ *Anisopappus davyi* subsp. *pumilus* (Hiern) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 386 (1996), **nom. illeg.**

≡ *Anisopappus davyi* S. Moore subsp. *pumilus* var. *pumilus* (Hiern) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 387 (1996), **nom. Illeg.**

- 1. Linear leaves, 0.8-1.5 (2) mm wide, generally revolute 2.1. subsp. *pumilus*
- 1'. Leaves narrowly oblanceolate, 1.5-6 mm wide, flat, rarely revolute 2.2. subsp. *davyi*

2.1 ***Anisopappus pumilus*** (Hiern) Wild subsp. ***pumilus***

- 1. Flowering stems 6-10 cm long; leaves 3-5(-8) mm long, some highly revolute, others with only slightly revolute borders 2.1.1 var. *pumilus*
- 1'. Flowering stems 15-45 cm long; leaves generally 5-13 mm long, all highly revolute 2.1.2 var. *bampsianus*

2.1.1 ***Anisopappus pumilus*** subsp. ***pumilus*** var. ***pumilus***

2.1.2 ***Anisopappus pumilus*** subsp. ***pumilus*** var. ***bampsianus*** (Lisowski) S. Ortiz, **comb. nov.**

≡ *Anisopappus bampsianus* Lisowski in Bull. Jard. Bot. Nat. Belg. 56: 199 (1986) [basion.];

Anisopappus davyi subsp. *pumilus* var. *bampsi-anus* (Lisowski) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 387 (1996), nom. Illeg.

= *Anisopappus lawalreanus* Lisowski in Bull. Jard. Bot. Nat. Belg. 56: 200 (1986)

2.2 *Anisopappus pumilus* subsp. *davyi* (S. Moore) S. Ortiz, comb. nov.

= *Anisopappus davyi* S. Moore in Bot. J. Linn. Soc. 47: 275 (1925) [basion.]

= *Anisopappus petitanus* Lisowski in Bull. Jard. Bot. Nat. Belg. 56: 202 (1986)

= *Anisopappus robynsianus* Lisowski in Bull. Jard. Bot. Nat. Belg. 56: 369 (1986)

= *Anisopappus lejolyanus* Lisowski in Bull. Jard. Bot. Nat. Belg. 56: 370 (1986)

= *Anisopappus upembensis* Lisowski in Bull. Jard. Bot. Nat. Belg. 56: 371 (1986)

4. *Anisopappus anemonifolius* (DC.) G. Tayl. in J. Bot. 71: 165 (1933). (*Anisopappus abercornensis* G. Tayl. in Ortiz *et al.*, 1996)

= *Epallage anemonifolia* DC., Prodr. 6: 4 (1838) [basion.]

= *Anisopappus abercornensis* subsp. *anemonifolius* (DC.) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 388 (1996), nom. Illeg.

= *Anisopappus angolensis* O. Hoffm. in Bol. Soc. Brot. 10: 176 (1892)

= *Sphacophyllum pusillum* S. Moore in J. Bot. 44: 147 (1906); *Epallage pusilla* (S. Moore) Humbert in Mém. Soc. Linn. Normandie, Bot. 25: 105 (1923)

= *Epallage anemonifolia* var. *confluens* Humbert in Mém. Soc. Linn. Normandie, Bot. 25: 110, 299 (1923)

= *Epallage calva* Humbert in Mém. Soc. Linn. Normandie, Bot. 25: 110, 299 (1923); *Epallage anemonifolia* var. *calva* (Humbert) Humbert, Fl. Madagascar, Composées 2: 610 (1962)

1. Generally perennial; leaves pinnatipartite, usually with more than 3 lateral pinnae; peduncles more than 0.6 mm wide; capitula more than

6 mm wide; pappus scales generally unequal, 0.2-1.5 mm long

..... 4.1. subsp. ***anemonifolius***
1'. Annual; leaves pinnatipartite with 1-3 lateral pinnae; peduncles less than 0.6 mm wide; capitula less than 8 mm wide; pappus scales generally equal, 0.1-0.3 mm long

..... 4.2. subsp. ***abercornensis***

4.1 *Anisopappus anemonifolius* (DC.) G. Tayl. subsp. *anemonifolius*

4.2 *Anisopappus anemonifolius* subsp. *abercornensis* (G. Tayl.) S. Ortiz, comb. nov.

= *Anisopappus abercornensis* G. Tayl. in J. Bot. 71: 164 (1933) [basion.]

= *Anisopappus annus* Lawalrée in Bull. Jard. Bot. État. 19: 220 (1949)

= ? *Anisopappus burundensis* Lisowski in Bull. Jard. Bot. Nat. Belg. 58: 259 (1988)

List of currently accepted names in *Anisopappus*

1. *Anisopappus chinensis* Hook. & Arn., Bot. Beechey Voy.: 196 (1837)

1.1. *Anisopappus chinensis* Hook. & Arn. subsp. *chinensis*

1.1.1. *Anisopappus chinensis* Hook. & Arn. subsp. *chinensis* var. *chinensis*

1.1.2. *Anisopappus chinensis* subsp. *chinensis* var. *rupestris* (DC.) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 383 (1996)

1.2. *Anisopappus chinensis* subsp. *buchwaldii* (O. Hoffm.) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 383 (1996)

1.2.1. *Anisopappus chinensis* subsp. *buchwaldii* var. *macrocephala* (Humbert) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 383 (1996)

1.2.2. *Anisopappus chinensis* subsp. *buchwaldii* var. *dentatus* (DC.) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 385 (1996)

1.3. *Anisopappus chinensis* subsp. *oliverranus* (Wild) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 385 (1996)

1.4. *Anisopappus chinensis* subsp. *lobatus* (Wild) Ortiz & Paiva in Bot. J. Linn. Soc. 117: 46 (1995)

1.5. *Anisopappus chinensis* subsp. *paucidentatus* (Wild) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 386 (1996)

1.6. *Anisopappus chinensis* subsp. *scrophulariifolius* (Bak.) S. Ortiz, Paiva & Rodr. Oubiña in Anales Jard. Bot. Madrid 54: 386 (1996)

2. *Anisopappus pumilus* (Hiern) Wild in Kirkia 4: 65 (1964)

2.1. *Anisopappus pumilus* (Hiern) Wild. subsp. *pumilus*

2.1.1. *Anisopappus pumilus* (Hiern) Wild subsp. *pumilus* var. *pumilus*

2.1.2. *Anisopappus pumilus* subsp. *pumilus* var. *bampsianus* (Lisowski) S. Ortiz, comb. nov.

2.2. *Anisopappus pumilus* subsp. *davyi* (S. Moore) S. Ortiz, comb. nov.

3. *Anisopappus grangeoides* (Vatke & Höpfner ex Klatt) Merxm. in Mitt. Bot. Staatssamml. München 9: 415 (1945)

4. *Anisopappus anemonifolius* (DC.) G. Tayl. in J. Bot. 71: 165 (1933)

4.1. *Anisopappus anemonifolius* (DC.) G. Tayl. subsp. *anemonifolius*

4.2. *Anisopappus anemonifolius* subsp. *abercornensis* (G. Tayl.) S. Ortiz, comb. nov.

5. *Anisopappus corymbosus* Wild in Kirkia 4: 61 (1964)

6. *Anisopappus longipes* (Comm. ex Cass.) Wild in Kirkia 4: 65 (1964)

7. *Anisopappus holstii* (O. Hoffm.) Wild in Kirkia 4: 69 (1964)

8. *Anisopappus marianus* Lawalrée in Bull. Jard Bot. Nation. Belg. 44 (1-2): 188 (1974)

9. *Anisopappus kirkii* (Oliv.) Brenan in Mem. New York Bot. Gard. 8(5): 478 (1954)

10. *Anisopappus sylvaticus* (Humbert) Wild in Kirkia 4: 71 (1964)

11. *Anisopappus salviifolius* (DC) Wild in Kirkia 4: 66 (1964)

12. *Anisopappus pinnatifidus* (Klatt) O. Hoffm. ex Hutch. in Kew Bull. 1917: 115 (1917)

13. *Anisopappus pseudopinnatifidus* S. Ortiz & Paiva in Bot. J. Linn. Soc. 117: 40 (1995)

Regarding this species, Herta Kolberg (National Botanical Research Institute, Windhoek, Namibia) has recently informed me (pers. comm.) that the typus collection is Giess, Volk and Bleissner 6728, not 6726 as erroneously stated in the original publication (ORTIZ & PAIVA, 1995) due to an error in the transcription of the number.

14. *Anisopappus fruticosus* S. Ortiz & Paiva in S. Ortiz, Paiva & Pulgar, Nordic. J. Bot. 21(2): 59 (2001). Species described by ORTIZ *et al.* (2001) and thus not included in Ortiz *et al.* (1996)

15. *Anisopappus junodii* Hutch. in Bull. Misc. Inf., Kew 1906: 249 (1906)

16. *Anisopappus smutsii* Hutch. in Bull. Misc. Inf., Kew 1933: 425 (1933)

17. *Anisopappus latifolius* (S. Moore) B. L. Burt in Hilliard & B. L. Burt, Notes Roy. Bot. Gard. Edinburgh 37 (2): 295 (1979)

Regarding *Anisopappus athanasioides* Paiva & S. Ortiz in S. Ortiz & Paiva, Bot. J. Linn. Soc. 117: 40 (1995), listed as taxon number 14 in ORTIZ *et al.* (1996), we have observed the presence that all marginal florets of the capitula are bilabiate and the arrangement of capitula is in racemes; these characters, along with other characters divergent from those of *Anisopappus*, suggest that this taxon should be considered as a

different monospecific genus (ORTIZ *et al.*, article in preparation).

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