




# *Senecio cymbalarifolius* (L.) Less. is the correct name for *S. sonchifolius* (L.) J.C.Manning & Magoswana, nom. illeg. and clarification of the name *S. sonchifolius* (L.) Moench (Asteraceae: Senecioneae)

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**Background:** Ongoing systematic studies in the African flora necessitate periodic nomenclatural adjustments and corrections.

**Objectives:** To effect requisite nomenclatural changes.

**Method:** Relevant literature was surveyed and type material located and examined.

**Results:** The combination *Senecio sonchifolius* (L.) J.C.Manning & Magoswana (2017), based on *Othonna sonchifolia* L., is an illegitimate later homonym for *S. sonchifolius* (L.) Moench (1802).

**Conclusions:** The name *Senecio cymbalarifolius* (L.) Less. is the earliest legitimate name in *Senecio* for the taxon previously known as *S. sonchifolius* (L.) J.C.Manning & Magoswana, nom. illeg. On internal evidence, we conclude that *S. sonchifolius* (L.) Moench was intended as a combination based on *Cacalia sonchifolia* L. and that the citation of the basionym as *Cineraria sonchifolia* L. was an error.

## Introduction

The combination *Senecio sonchifolius* (L.) J.C.Manning & Magoswana was recently published as the avowed correct name for *Senecio cymbalarifolius* (L.) Less., resulting from the conclusion that the basionym *O. sonchifolia* L. represented the earliest validly published name for the taxon (Magoswana et al. 2017). Unfortunately it now emerges that this combination is preoccupied by the earlier, heterotypic combination *S. sonchifolius* (L.) Moench (1802), rendering *S. sonchifolius* (L.) J.C.Manning & Magoswana an illegitimate later homonym (Turland et al. 2018: Art. 53.1). The next available name for the species in *Senecio* is *S. cymbalarifolius* (L.) Less. (Lessing 1832) (Turland et al. 2018: Art. 11.4, Ex. 17), which therefore continues to be the correct name for the taxon in that genus. Should the taxon be treated in another genus, however, the earlier *O. sonchifolia* L. (Linnaeus 1753) remains available.

There is, however, a slight complication in the status of *Senecio sonchifolius* (L.) Moench [currently treated as *Emilia sonchifolia* (L.) DC.], which was published in the *Supplementum ad Methodum Plantas...* (Moench, 1802) with a reference to '*Cineraria, sonchifolia* Murray Comment. Goett. Nov. T. III. p. 79. icon. t. 7' (Fig. 1). This is a reference to J.A. Murray's *Observationes...* (Murray 1773). The entry in question in Murray (1773) is, however, actually to *Cacalia sonchifolia* L. (Fig. 2), with an indirect reference to this name in the *Species plantarum* (Linnaeus

1753) (Fig. 3). The simplest interpretation is that Moench (1802) intended his name to be a combination in *Senecio* based on *Cacalia sonchifolia* L. (1753) but erred in citing Murray's (1773) entry as *Cineraria* instead of *Cacalia*. This interpretation is consistent with the description of the taxon by Moench (1802) as having erect capitula, with nodding florets in the detached capitulum [*'capitulis floriferis erectis, defloratis nutantibus.'*]. The apparently nodding florets in the detached capitulum, which match the illustration in Murray (1773) perfectly, are evidently an abnormality resulting from damage as they are not seen in the representation of the intact capitula. This is compelling internal evidence that Moench (1802) intended his name to apply to the plant depicted by Murray (1773). His error in the citation of the generic name does not affect the validity of the combination (Turland et al. 2018: Art. 41.3).

An alternative interpretation is that the citation by Moench (1802) of '*Cineraria, sonchifolia ...*' constitutes an indirect reference to the name *Cineraria sonchifolia* (L.) L., a combination published by Linnaeus (1763) based on *Othonna sonchifolia* L. (1753). While this interpretation would be nomenclaturally arguable, it is untenable in our opinion, given both the precise pagination of the Murray (1773) citation and the exact correspondence between the description by Moench (1802) and the illustration published by Murray (1773). On this basis we are confident that Moench (1802) intended his name to apply to the disciform taxon figured by Murray (1773) under the name *Cacalia sonchifolia* and not to the radiate *Cineraria sonchifolia*. We therefore accept the name published by

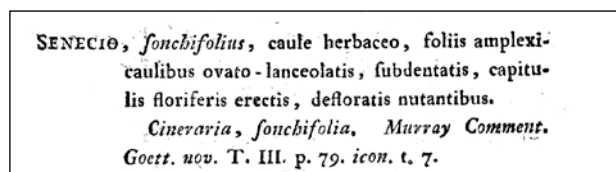


Figure 1. *Senecio sonchifolius* from Moench, *Supplementum ad Methodum Plantas...*: 231 (1802).

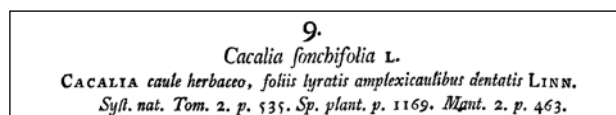


Figure 2. *Cacalia sonchifolia* L. from Murray, *Novi commentarii Societatis Regiae Scientiarum Gottingensis* 3: 79 (1773).

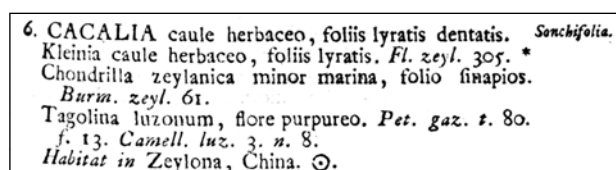


Figure 3. *Cacalia sonchifolius* from Linnaeus, *Species plantarum* 2: 835 (1753).

Moench (1802) as a combination based on *Cacalia sonchifolia* L. (1753).

Should there have been no internal evidence favouring one of the interpretations over the other, i.e. that there was no single clear reference to a basionym, then the name *Senecio sonchifolia* published by Moench (1802) would have been validly published as a new species. Any of the three possibilities still renders the later combination *S. sonchifolius* (L.) J.C.Manning & Magoswana illegitimate.

## Materials and methods

All relevant literature and type material was examined. Herbarium acronyms after Thiers (2015).

## Nomenclature

***Senecio cymbalarifolius*** (L.) Less., *Syn. Gen. Compos.*: 391 (1832). *Othonna cymbalarifolia* L., *Pl. Rar. Afr.*: 24 (1760). *Cineraria cymbalarifolia* (L.) L., *Sp. Pl. ed. 2, 2*: 1242 (1763). *Brachyrhynchos cymbalarifolius* (L.) DC., *Prodr.* 6: 438 (1838). Type: South Africa, 'Cap Bonae Spei', without date, *Oldenland s.n.* (G-herb. Burm. G00818194—image!, lecto., designated by Magoswana et al. in *Bothalia* 47(1)-a2213: 4 (2017).

*Othonna sonchifolia* L., *Sp. Pl.* 2: 924 (1753) [non *O. sonchifolia* DC., *Prodr.* 6: 482 (1838), nom. illeg. = *O. bulbosa* L. (1753)]. *Cineraria sonchifolia* (L.) L., *Sp. Pl. ed. 2, 2*: 1243 (1763). *Doria sonchifolia* (L.) Thunb., *Nov. Gen. Pl.*: 167 (1800). *Senecio sonchifolius* (L.) J.C.Manning & Magoswana in *Bothalia* 47(1)-a2213: 4 (2017), nom. illeg. [non *S. sonchifolius* (L.) Moench, *Suppl. Meth.*: 223 (1802)]. Type: South Africa, without precise locality or date, *Oldenland s.n.*, illustration in Breyne, *Prodr. Fasc. Rar. Pl.*: 31 t. 21, f.1 (1739).

***Emilia sonchifolia*** (L.) DC. in Wight, *Contr. Bot. India*: 24 (1834). *Cacalia sonchifolia* L., *Sp. Pl.* 2: 853 (1753). *Senecio sonchifolius* (L.) Moench [basionym incorrectly cited as *Cineraria sonchifolia*], *Suppl. Meth.*: 231 (1802). Type: 'habitat in Zeylona, China', [BM, herb. Hermann 2: 25, 4: 36, 4:66, no. 305 (multiple sheets of a single gathering), lecto., designated by Grierson in Dassanayke, *Revised Handb. Fl. Ceylon* 1: 252 (1980)].

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