

The Genus Sonchus and Allied Genera in the Canary Islands

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R e s u m e n

El Género Sonchus y Tres Géneros Aliados en las Islas Canarias.—Clave de las 30 especies del grupo de *Sonchus s.lat.* (Compositae), endémicas, nativas o naturalizadas en las Islas Canarias. Con notas sobre la distribución de cada especie. Clave y datos de distribución refieren a los géneros *Sonchus* (20 especies; subgen. *Sonchus* y *Dendrosonchus*), *Taeckholmia* (7 especies; subgén. *Taeckholmia* y *Pseudodendrosonchus*), *Babcockia* (monotípico), y *Launaea* (2 especies).

The genus *Sonchus* L. is represented in the Canary Islands by about 20 species, most of which are endemics of subgenus *Dendrosonchus* Webb et Sch. Bip. Three more genera, related to *Sonchus*, will also be discussed here, viz. *Taeckholmia* Boulos (7 species), *Babcockia* Boulos (monotypic) and *Launaea* Cass. (2 species). The two former genera are known to be endemic in the Islands.

In this paper a conspectus of the four genera and their Canarian species will be given, as well as the geographical distribution of these species. *All keys which will follow apply only to the species known from the Canary Islands.*

Key to the Genera

- 1 A. Heads narrow, usually double or more longer than broad, with less than 35 florets (12-29)
 - 2 A. Outer involucreal scales with scariar margins
. 4. *Launaea*

- 2 B. Outer involueral scales without scarious margins 2. *Taeckholmia*
- 1 B. Heads broader, usually less than double longer than broad, with over 35 florets (36-500).
 - 3 A. Achene 5 times or more longer than broad, c. cylindrical 3. *Babcockia*
 - 3 B. Achene less than 5 times longer than broad, compressed 1. *Sonchus*

1. *Sonchus* L.

Two subgenera are represented in the Canary Islands, they could be separated as follows:

- Plants herbaceous subgenus *Sonchus*
- Plants woody at least at the base
- subgenus *Dendrosonchus*

Key to the species of subgenus *Sonchus*

- 1 A. Plant with rhizome *S. maritimus*
- 1 B. Plant with tuberous root *S. tuberifer*
- 1 C. Plant with normal taproot.
 - 2 A. Achene without tubercles, ligule shorter than corolla tube.
 - 3 A. Annuals, margins of achene slightly or not ciliated *S. asper*
 - 3 B. Biennials, margins of achene densely ciliated *S. asper* ssp. *nymanii*
 - 2 B. Achene with tubercles, ligule as long as or longer than corolla tube.
 - 4 A. Ligule and corolla tube c. of the same length *S. oleraceus*
 - 4 B. Ligule longer than corolla tube.
 - 5 A. Heads narrow (c. 5 mm), achene narrowly lanceolate *S. tenerrimus*
 - 5 B. Heads broad (8-10 mm), achene broadly obovate.

c. = read *more or less*

- 6 A. Floret 14-20 mm long, outer involucre scales densely glandular-hairy . . . *S. bourgeaui*
- 6 B. Floret c. 11 mm long, outer involucre scales c. glabrous . . .
. . . *S. bourgeaui* var. *imbricatus*

Key to the species of subgenus *Dendrosonchus*

- 1 A. Head tomentose.
 - 2 A. Leaves rosetted at base, stem almost naked.
 - 3 A. Leaves with c. rounded lobes and spiny margins, head small (1.5 × 2.5 cm)
. *S. bornmuelleri*
 - 3 B. Leaves with c. triangular lobes, margins not spiny, head large (2.5 × 4.5 cm)
. *S. acaulis*
 - 2 B. Leaves not rosetted, stem leafy.
 - 4 A. Plant 40-100 cm high, leaves glabrous
. *S. congestus*
 - 4 B. Plant 60-220 cm high, leaves slightly pubescent *S. hierrensis*
- 1 B. Head glabrous.
 - 5 A. Upper part of peduncle swollen, with 6-12 bracts below the proper involucre scales.
 - 6 A. Bracts of peduncle c. 12, ratio between ligule and corolla tube 4:5 *S. fauces-orci*
 - 6 B. Bracts of peduncle c. 6, ratio between ligule and corolla tube 2:1
. *S. pinnatifidus*
 - 5 B. Upper part of peduncle not so.
 - 7 A. Leaves rosetted at base, stem short (1-5 cm), flowering branches almost naked.
 - 8 A. Leaves lyrate, whitish on lower surface, heads usually few, achene 2-2.5 mm long, pappus 4.5-6 mm long, highly deciduous
. *S. radicans*

- 8 B. Leaves pinnatipartite to pinatisect, heads usually numerous, achene 2.8-3.2 mm long, pappus 9-11 mm long, less deciduous
. *S. gomeraensis*
- 7 B. Leaves mostly rosetted at base, stem longer (5-20 cm), flowering branches bearing small characteristic leaves each with c. 10 pairs of subequal lobes
. *S. gummifer*
- 7 C. Leaves mostly cauline, stem long (over 20 cm).
 - 9 A. Ligule longer than corolla tube, leaves lyrate, heads few, plant small (less than 80 cm high).
 - 10 A. Upper leaf-lobe c. rounded, lateral lobes very small
. *S. brachylobus* var. *brachylobus*
 - 10 B. Upper leaf-lobe c. triangular, lateral lobes large
. *S. brachylobus* var. *canariae*
 - 9 B. Ligule c. as long as corolla tube, leaves not lyrate, heads many, plant large (80-250 cm high).
 - 11 A. Head small, with low number of florets (36-48) *S. palmensis*
 - 11 B. Head large, with a higher number of florets (50-200).
 - 12 A. Achene 3-3.5 mm long, involucre scales c. 40-50.
 - 13 A. Floret 16-18.5 mm long, pappus 8-10 mm long *S. lidii*
 - 13 B. Floret c. 14 mm long., pappus 6-7 mm long.
 - 14 A. Leaf-lobes broad, heads large
S. canariensis ssp.
. *canariensis*

- 14 B. Leaf - lobes narrow, heads small
 . *S. canariensis* ssp.
 *orotavensis*
- 12 B. Achene 2-2.75 mm long,
 involucral scales c. 25-35.
- 15 A. Flowering branches
 large, with many heads,
 peduncle long (up to 6
 cm) *S. pitardii*
- 15 B. Flowering branches
 small, with few heads,
 peduncle short (up to 3
 cm) *S. gandogeri*

2. *Taeckholmia* Boulos

This genus is endemic to the Canary Islands and comprises two subgenera which could be separated as follows:

Leaf-lobes 0.2-1 mm broad, ligule double or more the length of corolla tube *Taeckholmia*

Leaf-lobes 1-6 mm broad, ligule less than double the length of corolla tube *Pseudodendrosonchus* Boulos

Key to the species of subgenus *Taeckholmia*

- 1 A. Leaf-lobes flat, 0.5-1 mm broad, head over 4 mm long.
 - 2 A. Floret 7.5-9 mm long, pappus 3.5-5.75 mm long.
 *T. pinnata*
 - 2 B. Floret 7 mm long, pappus 2.5-3 mm long
 *T. canariensis*
- 1 B. Leaf-lobes c. capillary, less than 0.5 mm broad, head 3-4 mm long.
 - 3 A. Peduncle up to 3 mm long, achene 2-2.2 mm long *T. capillaris*
 - 3 B. Peduncle up to 1.5 cm long, achene 1.7-1.8 mm long *T. microcarpa*

Key to the species of subgenus *Pseudodendrosonchus*

- 1 A. Number of florets inferior to 20 per head, leaves of diverse forms on the same plant . . . *T. heterophylla*
- 1 B. Number of florets superior to 20, leaves more or less of the same form.
 - 2 A. Leaf-lobes broadly spaced, 1.5-2 mm broad *T. regis-jubae*
 - 2 B. Leaf-lobes narrowly spaced, up to 4 mm broad *T. arborea*

3. *Babcockia* Boulos

This monotypic genus is endemic in the Canary Islands (Gran Canaria) and is represented by *Babcockia platylepis* (Webb) Boulos.

4. *Launaea* Cass.

This large genus (c. 80 species) is represented in the Canary Islands by only two species which could be separated as follows:

- Plant shrubby, spiny *L. arborescens*
- Plant herbaceous, not spiny *L. nudicaulis*

GEOGRAPHICAL DISTRIBUTION

- Sonchus oleraceus* L. Cosmopolitan.
- S. tenerrimus* L. Mainly Mediterranean, also known from Canary Islands, Iran, Pakistan, U.S.S.R. (Armenia), Ethiopia, Sudan, St. Helena Island, Mexico (Cedros Island), U.S.A. (California), South Australia and New Zealand.
- S. bourgeaui* Sch. Bip. Fuerteventura and Lanzarote, Canary Is. and Morocco (Mogador and Mogador Is.).
- S. bourgeaui* Sch. Bip var. *imbricatus* (Svent.) Boulos Roque del Este and Gran Canaria (La Isleta), Canary Is.
- S. asper* (L.) Hill. Cosmopolitan.

- S. asper* (L.) Hill. ssp. *nymanii* (Tin. et Guss.) Hegi, Mainly Mediterranean, also known from Canary Islands, England, Ethiopia, South Australia, Iran and Iraq.
- S. maritimus* L. Mainly Mediterranean, also known from Portugal, Canary Islands?, U.S.S.R., Iraq, Iran, Afghanistan, Pakistan, Tibet, South Africa, South West Africa, Australia and England.
- The presence of this species in Canary Is. is based on one specimen (W!) from the Canary Islands without detailed locality; its presence should be considered doubtful till more specimens are observed.
- S. tuberifer* Svent. Tenerife (Masca), Canary Is.
- S. acaulis* Dum.—Cours. Gran Canaria and Tenerife, Canary Is.
- S. congestus* Willd. Tenerife and Gran Canaria, Canary Is.
- S. hierrensis* (Pitard) Boulos Hierro, La Palma and Gomera, Canary Is.
- S. bornmuelleri* Pitard La Palma (Barlovento), Canary Is.
- S. radicans* Ait. Tenerife, Canary Is.
- S. gomeraensis* Boulos Gomera, Canary Is.
- S. gummifer* Link Tenerife, Canary Is.
- S. fauces-orci* Knoche Tenerife (SW), Canary Is.
- S. pinnatifidus* Cav. Lanzarote and Fuerteventura, Canary Is., and Morocco (Western coast).
- S. brachylobus* Webb et Berth. Gran Canaria (N and NW), Canary Is.
- S. brachylobus* Webb et Berth. var. *canariae* (Pitard) Boulos Same as the typical variety.
- S. palmensis* (Sch. Bip.) Boulos La Palma, Canary Is.
- S. canariensis* (Sch. Bip.) Boulos Tenerife and Gran Canaria, Canary Is.
- S. canariensis* (Sch. Bip.) Boulos ssp. *orotavensis* Boulos Tenerife (Orotava), Canary Is.
- S. lidii* Boulos Hierro (El Golfo), Canary Is.
- S. gandogeri* Pitard Hierro (El Golfo), Canary Is.
- S. pitardii* Boulos Hierro (El Golfo), Canary Is.
- Taeckholmia pinnata* (L.f.) Boulos Gran Canaria and Tenerife, Canary Is.
- T. capillaris* (Svent.) Boulos Tenerife, Canary Is.

- Taekholmia canariensis* Boulos Gomera, Canary Is.
T. microcarpa Boulos Tenerife, Canary Is.
T. heterophylla Boulos Gomera, Canary Is.
T. regis-jubae (Pitard) Boulos Gomera and La Palma, Canary Is.
T. arborea (DC.) Boulos Tenerife, Canary Is.
Babcockia platylepis (Webb) Boulos Gran Canaria, Canary Is.
Launaea nudicaulis (L.) Hook. f. A Mediterranean-oriental species also known from the Canary Is., Madeira, Spain, North Africa, Egypt, Arabia and the Middle East eastwards to Persia. (after Jeffrey 1966).
L. arborescens (Batt.) Murb. Cape Verde Is. Boa Vista, also in the Canary Is., Morocco, Algeria and Spain. (after Jeffrey 1966).

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