



Fig. 49. Plantation of *Agave sisalana* Perrine. (Picture by Geoff R. Nichols)



Fig. 50. Bulbils of *Agave sisalana* Perrine
(Picture by Neil R. Crouch)



Fig. 51. *Agave sisalana* Perrine spreading into natural vegetation.
(Picture by Helmut G. Zimmermann)

6. *Agave vivipara* L. var. *vivipara*

In: *Species plantarum*: 323 (1753a).

=*Agave decipiens sensu auct.* Smith & Steyn (1999b) *non* Baker.

Medium-sized, shortly caulescent, monocarpic, rosulate, perennial, leaf succulent; rosettes up to 1.3 m tall; proliferous through subterranean stolons. **Leaves** rigidly spreading to recurving, narrowly lanceolate, 0.75–1 m long, dark green; margins armed with simple teeth, recurved, 1–2 mm long; apical spine conical, 1–1.5 cm long. **Inflorescence** paniculate, branched, 6–7 m tall, usually bulbiferous. **Flowers** erect, 5–5.5 cm long, yellowish green. **Stamens** with filaments 4.5–4.8 cm long; anthers excentric, 2 cm long, light green with brownish red speckles. **Fruit** a capsule, ellipsoid to oblong, 3.5–5 cm long. **Seed** not seen. **Distribution**: SA. (Fig. 52).

References: Wijnands (1983), García-Mendoza & Chiang (2003), Jarvis (2007).

It should be noted that *Agave vivipara* var. *vivipara* has locally been confused with *A. decipiens* Baker. The latter has been recorded from tropical areas of the southeastern United States of America, for example the state of Florida. In South Africa the latter species has only been observed in cultivation in gardens of beach-front hotels in Durban in KwaZulu-Natal and in the industrial area of Springs in Gauteng, but has not escaped into nature. The climate in Springs is near-continental and winter temperatures regularly drop below freezing, which indicates the wide ecological amplitude of *Agave decipiens*.

Agave vivipara var. *vivipara* is one of two species of *Agave* naturalised in southern Africa of which its sword-shaped leaves are mid- to dark green (Fig. 53). However, the other one, *A. sisalana*, has smooth leaf margins, while those of *A. vivipara* var. *vivipara* are armed with prominent, greenish brown teeth. *Agave angustifolia*, on the other hand, has a somewhat similar growth form to that of *A. vivipara* var. *vivipara*, but the latter's leaves are generally broader in the middle. In addition, the mid-rosette leaves are carried more or less erect and are much more widely spaced on the short stem, making the leaf bases clearly visible (Fig. 54) [see e.g. Jarvis (2007: 121, plate on the left)]. Furthermore, García-Mendoza & Chiang (2003) showed that *Agave angustifolia* and *A. vivipara* warrant recognition as independent species, a proposal we follow here, as opposed to the treatments of Wijnands (1983) and Thiede (2001) that regarded these two species as conspecific (see also Smith & Steyn, 1999a).

The species was likely introduced for its horticultural potential as an accent plant in large gardens. It has the potential to become a real pest plant as a result of the vast number of bulbils formed on the inflorescences, after flowering.

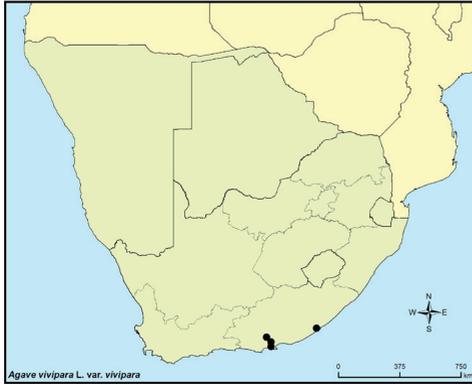


Fig. 52. Distribution map of *Agave vivipara* L.



Fig. 53. Mid- of to dark green sword-shaped leaves *Agave vivipara* L. carry marginal spines, unlike those of *A. sisalana* Perrine.
(Picture by Gideon F. Smith)



Fig. 54. Leaf bases are visible in *Agave vivipara* L. while in *A. angustifolia* Haw. they are obscure. (Picture by Estrela Figueiredo)

7. *Agave wercklei* F.A.C. Weber ex Wercklé

In: *Monatsschr. Kakteenk.* 17: 71–72 (1907a).

=*Agave costaricensis* (This name, sometimes used for the species in the horticultural trade, is of unknown origin.)

Common names: bondelgaringboom (Afrikaans).

Medium-sized to large, acaulescent, monocarpic, rosulate, perennial, leaf succulent; rosettes up to 2 m tall, non-surculose. **Leaves** rigidly spreading, ovate to lanceolate, short-acuminate, 0.7–1.5 m long, light greyish green, often with a whitish grey sheen; margins armed with simple teeth, straight or variously recurved, 3–4 mm long; apical spine conical, 2–3 cm long. **Inflorescence** paniculate, branched, 4–8 m tall, profusely bulbiliferous. **Flowers** erect, up to 8 cm long, basal part light green, tepals golden yellow. **Stamens** with filaments 9 cm long; anthers golden yellow, 1.6 cm long. **Fruit** a capsule, ovoid-angular, 2.2–3 × 1.5–1.8 cm. **Seed** hemispherical, 5 × 4 mm, black. **Distribution:** SA. (Fig. 55).

References: Wercklé (1907b), Thiede (2001), Smith & Steyn (2002a), Smith & Steyn (2003).

Interestingly, Carlos Wercklé, who did valuable work on the ferns and vegetation of Costa Rica, validated the name of this taxon that had been proposed to commemorate him by Weber and so *Agave wercklei* was named after himself (Wercklé, 1907a, b).

This is the only species of *Agave* naturalised in southern Africa that does not proliferate through basal or stem suckers before, or after, flowering (Fig. 56). To compensate for the lack of basal sprouts it produces thousands of bulbils (Fig. 57) on the tall branched inflorescence after flowering (Fig. 58). These drop to the ground and easily strike root where they fall (Fig. 59). The flowers are a pleasant bright yellow colour (Fig. 60).

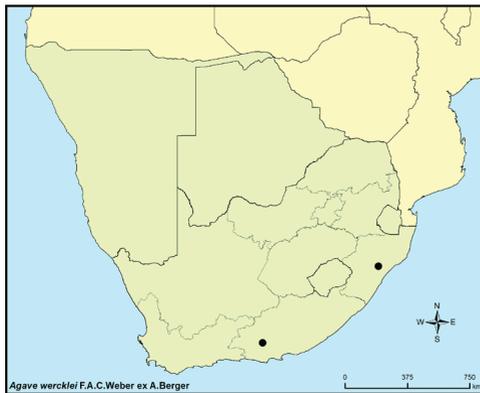


Fig. 55. Distribution map of *Agave wercklei* F.A.C. Weber ex Wercklé.



Fig. 56. Rosettes of *Agave wercklei* F.A.C.Weber ex Wercklé are non-suckering. (Picture by Gideon F. Smith)



Fig. 57. Bulbils of *Agave wercklei* F.A.C.Weber ex Wercklé. (Picture by Neil R. Crouch)

It is unknown when and where the species was introduced into South Africa. It was more than likely brought in for its value as a horticultural plant, given that it will not sucker in a pot or the open ground, making it more manageable than species such as *Agave americana* and *A. sisalana*. The species was originally recorded from a single locality near the Baakens River Valley in Port Elizabeth in the Eastern Cape Province, but has more recently also been observed near Pietermaritzburg in KwaZulu-Natal.



Fig. 58. Branched inflorescence of *Agave wercklei* F.A.C.Weber ex Wercklé. (Picture by Neil R. Crouch)



Fig. 59. Bulbils of *Agave wercklei* F.A.C.Weber ex Wercklé rooting and forming a colony. (Picture by Neil R. Crouch)



Fig. 60. Bright yellow flowers of *Agave wercklei* F.A.C.Weber ex Wercklé. (Picture by Neil R. Crouch)

***Furcraea* Vent.**

Robust, monocarpic, usually rosulate multi-annual perennials arising from short rhizome or short erect caudex, some species caulescent, palm tree-like. **Stem** up to 1.2 m tall, commonly with monocotyledonous type secondary growth. **Leaves** usually crowded in an apical or basal rosette, leathery to succulent, amplexicaul, persisting for many years, vibrant or glaucous green; each vascular bundle with well-developed fibrous cap at phloem pole. **Inflorescence** terminal, tall, fast-growing, terminating in a panicle, often massive. **Flowers** pendulous, campanulate, bisexual, regular or somewhat irregular, pedicellate, 3-merous throughout, often replaced by small, globular bulbils. **Perianth** white to greenish white, petaloid, 3 + 3, spreading, often fleshy, free, not forming a tube. **Stamens** inserted, 3 + 3, basally expanded; anthers mostly dorsifixed, introrse, versatile opening by longitudinal slits, linear to oblong. **Filaments** swollen below middle. **Ovary** inferior, 3-locular, with septal nectaries; placentation axile; ovules in 2 vertical rows in each locule; style stout, swollen basally with 3 prominent angles, inserted, terminal; stigma 3-lobed. **Fruit** a loculicidal capsule. **Seeds** many, black, flattened.

References: Ventenat (1793), Drummond (1907), Verhoek (2002), Crouch & Smith (2011).

Furcraea is a small genus in which only 21 species are included. Several attain tree-like dimensions, and their stems can reach a length of 1.2 m or more. The leaves are a vibrant or glaucous green colour and arranged in a terminal rosette, giving the plants a palm tree-like appearance when old. The flowers are pendulous, bell-shaped, and, in cultivated and naturalised forms often replaced by small, globular bulbils. The perianth is mostly free, forming a very short tube. The filaments are swollen below the middle. The style is stout and swollen basally with three prominent angles.

Most species have been introduced from tropical America, and one of these has become established in southern tropical Africa. This species, *Furcraea foetida* (L.) Haw. (= *F. gigantea* Vent.), escaped from sites of habitation and plantations established for fibre production, mainly in the bushveld (savanna) and subtropical eastern areas of the subcontinent. It is colloquially known as Mauritius hemp or green aloe, and is also naturalised in Zambia and Zimbabwe. Although not yet recorded from Angola, Malawi or Mozambique, it more than likely also occurs in the subtropical areas of these countries.

***Furcraea foetida* (L.) Haw.**

In: *Synopsis plantarum succulentarum*: 73 (1812).

=*Agave foetida* L.

=*Furcraea gigantea* Ventenat

Common names: furcraea, green aloe, Mauritius hemp (English); furcraea, nooiensgaringboom (Afrikaans).

Large to massive, acaulescent or short-stemmed, multi-annual, monocarpic, rosulate, perennial, leaf succulent; rosettes up to 2.5 m tall, proliferous through stem suckers. **Leaves** erect at first, becoming spreading, stiff, lanceolate, 1.8–2.4 m long, verdant green to yellowish green; margins hard, distally smooth, armed with a few hooked, simple teeth towards base; apex a firm, blunt point. **Inflorescence** paniculate, branched, 5–12 m tall, always bulbiferous. **Flowers** pendulous, 7–10 cm long, in clusters of 2–5, white to shades of greenish white. **Stamens** inserted; filaments short, basally expanded; anthers centric to excentric, 3–3.6 cm long, yellow. **Ovary** inferior, 1.2–1.5 cm long; style inserted, dilated, 3-lobed proximal to middle; stigma 3-lobed. **Fruit** a capsule, loculicidally dehiscent, infrequently produced. **Seeds** many, flat, in 2 rows per locule, black. **Distribution:** SA. (Fig. 61).

References: Howard (1979), Verhoek (2009), PIER (2010), Crouch & Smith (2011).

Plants can be easily distinguished from agavoid look-alikes as a result of their light green leaf colour (Fig. 62), leaf margins that are smooth along the distal half (Fig. 63), down-turned, bell-shaped flowers (Fig. 64), and round bulbils (Fig. 65). The inflorescence can reach a height of 12 m and typically has drooping lateral branches (Fig. 66). *Furcraea foetida* occurs naturally from Guadaloupe south through northern South America to Brazil and the Caribbean (Greater Antilles) (Crouch & Smith, 2011).

The arrival of *Furcraea foetida* in South Africa may be traced to its importation by the Natal Botanical Gardens (now the Durban Botanic Gardens) sometime before the early 1880's, c. 130 years ago (Crouch & Smith, 2011). Plants were previously established in plantations from where they have started escaping. Initial eradication efforts may have to be focused on the physical removal of plants. However, this labour intensive process may prove to be feasible in the case of isolated populations only.



Fig. 61. Distribution map of *Furcraea foetida* (L.) Haw.



Fig. 62. Leaves of *Furcraea foetida* (L.) Haw. are verdant green.
(Picture by Neil R. Crouch)

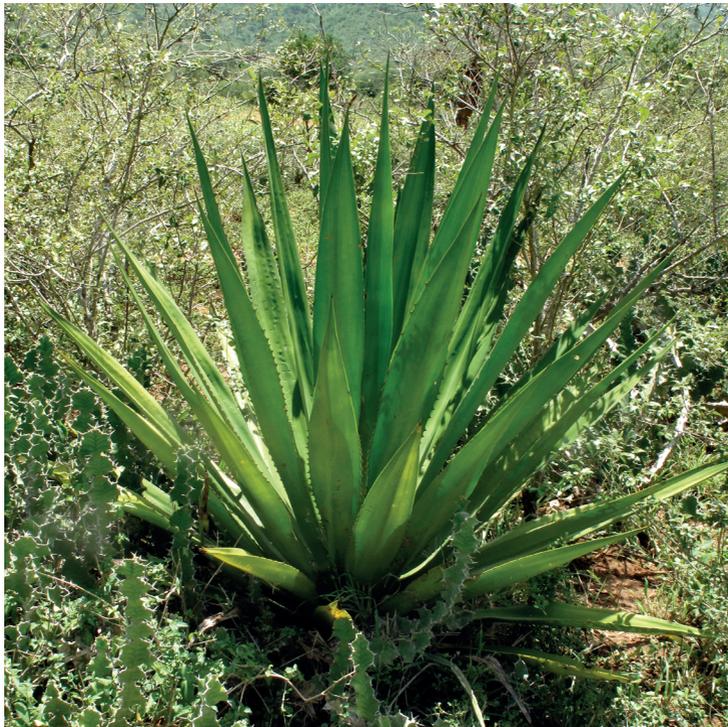


Fig. 63. The leaves of *Furcraea foetida* (L.) Haw. lack teeth at the distal end. (Picture by Neil R. Crouch)



Fig. 64. The flowers of *Furcraea foetida* (L.) Haw. are bell-shaped and drooping. (Picture by Geoff R. Nichols)



Fig. 65. Bulbils of *Furcraea foetida* (L.) Haw. (Picture by Neil R. Crouch)



Fig. 66. Inflorescences of *Furcraea foetida* (L.) Haw. (Picture by Geoff R. Nichols)

AIZOACEAE Martinov

(Ice plant family; *Vygiefamilie*)

by

M. Walters

Annual, biennial or perennial herbs, subshrubs or shrubs, rarely plants reduced to a single leaf-pair. **Stems** erect or prostrate and mat-forming, or underground. **Leaves** usually simple, often fleshy or scale-like, opposite or sometimes alternate, margins mostly entire; epidermis sometimes with bladder cells, often papillate to pubescent; blade flat, terete or triquetrous; true stipules absent, sometimes a stipuliform appendage present or leaves sessile or with leaf sheath. **Inflorescence** a terminal or seemingly axillary cyme, or flowers solitary; bracts present or absent. **Flowers** usually bisexual, rarely unisexual, actinomorphic, perigynous to hypogynous or epigynous, hypanthium present, with or without pedicel. Perianth consisting of sepals and petals or perigone. **Sepals** (3–)5(–8), sometimes petaloid and coloured, often with dorsal subapical appendage. **Petals** commonly absent or numerous, distinct or connate proximally, often 2–4 seriate, linear. **Stamens** 1–very numerous, free or connate at base, rarely connate with petals forming a tube; anthers bilocular, dehiscing by longitudinal slits. **Ovary** superior, inferior or semi-inferior, 1–5- or many- carpellate, syncarpous; ovules 1–many per carpel; styles 1–25 or absent, distinct or partly connate; stigmas 2–25. Nectaries absent, separate or in a ring around ovary. **Fruit** a hygrochastic loculicidal, rarely septicidal or xeromorphic capsule, with or without membranes covering the seeds, sometimes dehiscence circumscissile, or fruit a hard 1-seeded nut, or more rarely a drupe. **Seed** 1–many, usually ± ovoid, sometimes with aril, usually papillose.

References: Hartmann (2001a), Vivrette *et al.* (2003).

The family treatment here follows that of Smith *et al.* (1998) and Hartmann (2001a), and excludes the Molluginaceae while including groups sometimes considered families of their own, e.g. Sesuviaceae, Tetragoniaceae and Mesembryanthemaceae. The Aizoaceae, as treated here, consists of about 130 genera and 2 500 species (Vivrette *et al.*, 2003).

Members of the Aizoaceae are found on all continents (except Antarctica) (Vivrette *et al.*, 2003), throughout the tropics and subtropics with the centre of diversity (at species level) being in the southwestern part of Africa (Smith *et al.*, 1998; Hartmann, 2001a). Species may occur in habitats as diverse as dry subtropical deserts, wet tropical coasts, and snow-covered subtropical mountains, but the highest number of genera and species inhabit semi-arid (100–400 mm annual precipitation) winter-rainfall areas (Hartmann, 2001a). Particularly the group popularly known as mesembs ('vygies' in Afrikaans; also known as fig-marigolds, flowering stones, ice plants and midday flowers), have diversified extensively in southern Africa's winter-rainfall area, with over 1 500 species being known from, and mostly restricted to, this region (Smith *et al.*, 1998; Van Jaarsveld *et al.*, 2000).

Many members of the family are of economic importance as ornamentals and are in

cultivation worldwide resulting in a number of species occurring outside their natural distribution ranges e.g. *Carpobrotus edulis* (L.) N.E.Br., *Mesembryanthemum crystallinum* L. or *Disphyma crassifolium* (L.) L.Bolus (Vivrette *et al.*, 2003). Some species are also used to stabilise sand dunes in coastal regions (Heywood *et al.*, 2007), while others are important in the southern African medicinal plant trade (Smith & Crouch, 1999).

Only one species from a single genus is naturalised in southern Africa.

***Tetragonia* L.**

Annual or perennial herbs or subshrubs, with shiny, translucent bladder cells, resulting in a white appearance of the leaves, glabrous, pilose, or papillate. Stems erect, ascending or prostrate, semi-woody at base. **Leaves** alternate, often opposite basally; petiole short to long; blade flat, ovate to almost linear, margins entire to slightly sinuate or shallowly lobed; epidermis with variously-shaped papillae, often of two types with one elongate and hairy; stipules absent. **Inflorescences** axillary clusters of flowers or flowers solitary, sessile or peduncled; bracts usually absent. **Flowers** bisexual or unisexual, inconspicuous, 0.5–1 cm in diameter, sessile or pedicellate. **Perianth** campanulate, adnate to ovary; lobes (3–)4(–7), green or yellow adaxially, basally united into a short tube. **Petals** and petaloid staminodia absent. **Stamens** 1–20, usually twice the number of the perianth lobes, perigynous. **Pistil** 3–10-carpellate. **Ovary** inferior, (1–)3–10-loculed; ovule 1 per locule, pendulous; styles 3–10; stigmas 3–10. **Fruit** a woody, indehiscent nut with persistent perianth, ridged, winged or tuberculate, usually with 4 rows of ornaments, often apically as horns, brown to black. **Seeds** 1–10, sub-reniform or pyriform, light brown, arils absent.

References: Adamson (1955), Taylor (1994), Hartmann (2001b), Lu & Hartmann (2003), Vivrette (2003).

Tetragonia consists of about 60 species (Lu & Hartmann, 2003; Vivrette, 2003) with representatives in Africa, South America, East Asia, Australia and New Zealand, where they prefer tropical climates though are also found in drier climates in the southern hemisphere (Taylor, 1994; Hartmann, 2001b). Some members of the genus have naturalised elsewhere (Lu & Hartmann, 2003; Vivrette, 2003).

The name for the genus comes from the Greek words *tetra* (four) and *gone* (reproductive organs), and refers to the four-angled or four-winged fruits found in many of the species (Hartmann, 2001b).

There are 32 species of *Tetragonia* in South Africa (Germishuizen *et al.*, 2006). *Tetragonia tetragonioides* was classified in subgenus *Tetragonoides* DC. (Adamson, 1955). The subgenus is characterised by the simple fruit, 1–8-celled, with cells as many as fruit cells, stamens up to twice the number of perianth segments and ovary bulging above the insertion of the perianth (Adamson, 1955). *T. tetragonioides* can be distinguished from the other species in the subgenus that occur in South Africa with the following key [adapted from Adamson (1955)]:

Key to distinguish *T. tetragonioides*

1. Flowers in groups of 3–5 or more 2
- 1'. Flowers solitary or in pairs 3
2. Flowers sessile, ovary projecting as a cone; fruit with 3–4 flat projections at the top (*Tetragonia microptera*)
- 2'. Flowers shortly pedicellate; ovary with 2–3 obtuse projections around the styles; fruit ridged with spine-like outgrowths on the ridges (*Tetragonia echinata*)
3. Fruit covered all over with spine-like outgrowths (*Tetragonia acanthocarpa*)
- 3'. Fruit without spine-like outgrowths 4
4. Plant papillose-hairy all over; stamens as many as perianth segments; fruit ridged (*T. caesia*)
- 4'. Plant glabrous-papillose; stamens twice as many as perianth segments; fruit smooth, with horn-like projections at the top *Tetragonia tetragonioides*

Tetragonia tetragonioides (Pall.) Kuntze

In: *Revisio Generum Plantarum* 1: 264 (1891) (as “*tetragonioides*”).

=*Demidovia tetragonioides* Pall. (basionym)

=*Tetragonia expansa* Murray

Common name: New Zealand spinach (English).

Annual herbs, prostrate to ascending, up to 60 cm tall. Stems mat-forming; internodes with densely placed bladder cells when young. **Leaves** alternate; petiole 0.5–3 cm long, thick, winged; blade rhomboid-ovate or deltoid-ovate, 0.5–10.7 × 2.5–8 cm, base truncate, pale green abaxially, dark green adaxially, epidermis with large, globose papillae abaxially, fewer along the margins,. **Flowers** solitary, rarely 3, sessile or with pedicel up to 2 mm long. **Perianth** with tube 2–3 mm long; lobes spreading, usually 4, up to 2 mm long, ovate to semi-orbicular, papillate and green outside, bright yellow to yellowish green and minutely papillate inside. **Stamens** 10–13, clustered or scattered. **Fruit** turbinate, 0.8–1.2 cm long and 1 cm in diameter; horns 4–6. **Seeds** as many as locules, pyriform, smooth, amber to light brown. **Distribution:** SA. (Fig. 67).

References: Hartmann (2001b), Lu & Hartmann (2003), Vivrette (2003).

First collected from New Zealand, this plant became known as a food plant and has spread all over the world (Hartmann, 2001b), becoming naturalised in many regions (Lu & Hartmann, 2003; Vivrette, 2003). As the common name suggests, New Zealand spinach may be eaten, raw or cooked, as a leaf vegetable and is a delicious spinach substitute (Fig. 68) (Plants for a Future, 2008). Seeds require

warm temperatures to germinate and plants are cultivated and sold as a summer spinach in temperate regions. In certain Asian cultures it is believed to be effective against enteritis and stomach ache (Sung *et al.*, 1998), as well as stomach cancer and stomach ulcers (Kato *et al.*, 1985).

It is naturalised in the coastal region of KwaZulu-Natal in South Africa. It is possible that the introduction of this species is due to plants being washed ashore from passing ships (Fox & Norwood Young, 1982). A place near Richards Bay is known as Spinach Point due to the fact that local Zulus would load their canoes with plant material from that area (Fox & Norwood Young, 1982). Plants are frost-sensitive (Plants for a Future, 2008) and unlikely to survive the cold winters of the South African interior above the Great Escarpment without protection under glass or in plastic tunnels. Thus far the species does not appear to be problematic and no eradication measures are necessary. However, where possible, known populations should be monitored for future expansion. Vegetatively plants (Fig. 69, 70) look similar to some representatives of what Smith *et al.* (1998) termed the 'weedy mesembs', but the flowers of *T. tetragonoides* are insignificant (Fig. 71), unlike the strawberry-red ones of the similar-looking *Aptenia cordifolia* (L.F.) Schwantes, for example.

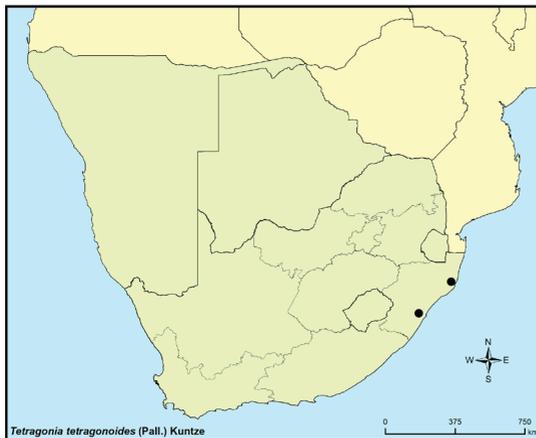


Fig. 67. Distribution map of *Tetragonia tetragonoides* (Pall.) Kuntze.



Fig. 68. A dish prepared from *Tetragonia tetragonioides* (Pall.) Kuntze leaves.
(Picture by Gideon F. Smith)



Fig. 69. Colony of *Tetragonia tetragonioides* (Pall.) Kuntze.
(Picture by Neil R. Crouch)



Fig. 70. Plant of *Tetragnonia tetragonioides* (Pall.) Kuntze.
(Picture by Neil R. Crouch)



Fig. 71. Flowers and crystalline leaf surface of *Tetragnonia tetragonioides* (Pall.) Kuntze. (Picture by Neil R. Crouch)

BASELLACEAE Moq.

(Madeira-vine family; *Madeira-klimopfamilie*)

by

M. Walters

Usually glabrous vines or decumbent to procumbent herbs; roots and stem base fibrous to sometimes tuberous and thickened, entire plants fleshy to succulent; stems glabrous, rarely asperous (or puberulent when young). **Leaves** spirally arranged, petiolate (sometimes almost sessile), simple, entire (rarely dentate by glands), sometimes with reddish margin often softly succulent; stipules absent. **Inflorescence** an axillary or terminal spike, raceme, panicle or dichasium; bracts persistent or deciduous; pedicel present or absent; bracteoles 2 (rarely absent), opposite, at pedicel apex, sometimes displaced when pedicel lengthens, persistent or deciduous. **Flowers** sessile or pedicellate, actinomorphic, bisexual (rarely functionally unisexual), cleistogamous or chasmogamous, small. **Sepals** 2, valvate, opposite, free to the base or partly connate, fused with petals at least at the base, entire, persistent, often somewhat accrescent in fruit, membranous to thick (rarely fleshy), sometimes with dorsal wing or gibbous at the base, greenish, whitish, yellowish or reddish at anthesis or pale, brownish or \pm black when in fruit. **Petals** usually 5, persistent, often somewhat accrescent in fruit, connate at the base only or up to $\frac{2}{3}$ of their length, greenish, whitish, yellowish or reddish at anthesis or pale, brownish or \pm black when in fruit, membranous to thick (rarely fleshy). **Stamens** 5, epipetalous, basally connate or fused up to $\frac{3}{4}$ of their length with the petals; anthers dorsifixed or basifixed, tetrasporangiate, 2-locular, dehiscent by longitudinal or apical slits. **Ovary** superior, 3-carpellate, syncarpous, 1-locular with a single basal ovule; styles 3 or 1 that is 3-partite to the base or almost so; stigmas linear to capitate or 3-lobed (rarely bifid). **Fruit** a thin-walled nutlet, indehiscent, smooth (sometimes rugose), surrounded at the base to completely enclosed by the persistent dry or fleshy perianth. **Seed** with a membranous testa, usually rust-coloured, embryo annular to cochleate.

References: Sperling & Bittrich (1993), Eggli (2002a), Vincent (2003), Eriksson (2007).

The Basellaceae is a small family consisting of four genera (*Anredera* Juss., *Basella* L., *Tournonia* Moquin-Tandon, *Ullucus* Caldas.) with 19 species of mostly succulent, short-lived, twining, scandent or trailing vines or herbs. Three genera (*Anredera*, *Tournonia* and *Ullucus*) are native to the tropics of the New World and the Andean regions of America. The genus *Basella* occurs in Madagascar, South and East Africa and one species, *Basella alba* L., has a pantropical distribution (Sperling & Bittrich, 1993; Eriksson, 2007).

Species in the Basellaceae are mostly distinguished by their reproductive parts. Flowers of *Basella* are sessile and arranged on generally unbranched spikes (*B. paniculata* Volkens is abundantly branched). *Anredera* and *Ullucus* have pedicellate flowers in racemes or panicles; *Tournonia* is distinguished by its axillary dichasia (Eriksson, 2007).