

Genus Crassula – the sections according to Tölken and IHSP

Section I Helophytum
Section II Glomeratae
Section III Dinacria
Section IV Filipedes
Section V Deltoideae
Section VI Anacampseroideae
Section VII Petrogeton
Section VIII Galpiniflora
Section IX Acutifolia
Section X Squamulosae
Section XI Subulares
Section XII Curtogyne
Section XIII Kalosanthes
Section XIV Rosulares
Section XV Perfilatae
Section XVI Columnares
Section XVII Argyrophylla
Section XVIII Arta
Section XIX Crassula
Section XX Globulea

Section I Helophytum (Eckl. & Zeyh.) Tölken

Type species: *C. natans* (Thunb.) Ekl. & Zeyh.

Mostly annual plants, often aquatic plants.

Distribution : Very common in South Africa but also worldwide in temperate to tropical climate.

Species :

Crassula aphylla
Crassula aquatica
Crassula drummondii
Crassula elatinoides
Crassula gemmifera
Crassula granvikii
Crassula hedbergii
Crassula helmsii
Crassula inanis
Crassula kirkii
Crassula longipes
Crassula manaia
Crassula mataikona
Crassula minutissima
Crassula moschata
Crassula multicaulis
Crassula natans (var. *minus*, var. *natans*)

Crassula peduncularis
Crassula ruamahanga
Crassula saginoides
Crassula sinclairii
Crassula solieri
Crassula tuberella
Crassula vaillantii
Crassula venezuelensis
Crassula viridis

Section II Glomeratae Haw.

Type species : *C. glomerata* Berg.

Mostly annual plants, few perennial.
Distribution : Africa, India, Australia.

Species

Crassula alata (ssp. *alata*, ssp. *pharnaceoides*)
Crassula basaltica
Crassula bergioides
Crassula campestris
Crassula closiana
Crassula colorata (var. *acuminata*, var. *colorata*, var. *miriamiae*)
Crassula connata
Crassula decumbens (var. *brachyphylla*, var. *decumbens*)
Crassula dodii
Crassula exserta
Crassula glomerata
Crassula hirsuta
Crassula humbertii
Crassula hunua
Crassula lanceolata (ssp. *denticulata*, ssp *lanceolata*, ssp. *transvaalensis*)
Crassula minuta
Crassula muscosa (var. *muscosa*, var. *obtusifolia*, var. *parvula*, var. *polpodacea*)
Crassula numaisensis
Crassula ob lanceolata
Crassula pageae
Crassula phascoides
Crassula rhodesica
Crassula roggeweldii
Crassula schimperi (ssp. *phyturus*, ssp. *schimperi*)
Crassula sieberiana (ssp. *rubinea*, ssp. *sieberiana*, ssp. *tetramera*)
Crassula strigosa
Crassula tenuipedicellata
Crassula thunbergiana (ssp. *minutiflora*, ssp. *thunbergiana*)
Crassula tillaea
Crassula umbellata

Section III Dinacria (Harv.) Schönl.

Type species : *C. filiformis* (Eckl. & Zeyh.) Harv.

Annual plants.

Distribution : N and W Eastern Cape.

Species :

Crassula depressa

Crassula dichotoma

Crassula filiformis

Crassula grammantoides

Crassula sebaeoides

Section IV Filipedes (Harv.) Schönl.

Type species : *C. expansa* Dryand.

Perennial plants, flowers solitary and borne in the leaf axils or in terminal clusters.

Distribution : Tropical Africa to Western Cape and Madagascar.

Species :

Crassula expansa (ssp. *expansa*, ssp. *filicaulis*, ssp. *fragilis*, ssp. *pyrifolia*)

Crassula papillosa

Crassula peculiaris

Crassula tenuicaulis

Crassula volkensii (ssp. *coleae*, ssp. *volkensii*)

Section V Deltoideae DC

Type species : *C. deltoidea* Thunb.

Perennial plants with fleshy deltoid leaves covered with papillae, flowers urceolate.

Distribution : From southern Namibia and Free State to Northern Cape and Western Cape.

Species :

Crassula corallina (ssp. *corallina*, ssp. *macrorrhiza*)

Crassula deltoidea

Crassula elsieae

Crassula vestita

Section VI Anacampseroideae Haw.

Type species : *C. telephioides* Haw.

Mostly perennial plants, creeping to erect and with thick stems, flowers wide open, star-like.
Distribution : S and E South Africa as well as south-western parts of the Cape region.

Species :

Crassula alticola
Crassula arborescens (ssp. *arborescens*, ssp. *undulatifolia*)
Crassula cordata
Crassula crenulata
Crassula inandensis
Crassula lactea
Crassula multicava (ssp. *floribunda*, ssp. *multicava*)
Crassula ovata
Crassula pellucida (ssp. *alsinoides*, ssp. *brachypetala*, ssp. *marginalis*, ssp. *pellucida*, ssp. *spongiosa*)
Crassula sarmentosa (var. *integrifolia*, var. *sarmentosa*)
Crassula spathulata
Crassula streyi

Section VII Petrogeton (Eckl. & Zeyh.) Walp.

Type species : *Petrogeton typicum* Eckl. & Zeyh.

Plants with underground tubers and star-like flowers.

Distribution : Mainly in south-western Cape but also in eastern Cape Province and the Drakensberg.

Species :

Crassula alcicornis
Crassula capensis (var. *albertiniae*, var. *capensis*, var. *promontorii*)
Crassula dentata
Crassula nemorosa
Crassula saxifraga
Crassula simulans
Crassula umbella
Crassula umbraticola

Section VIII Galpiniflora Tölken

Type species : *C. galpinii* Schonl.

Only one species in this section – perennial, leaves rosulate, inflorescence axillary, flowers star-like.

Distribution : Drakensberg mountains and occasionally in mountains south-east of it.

Species :

Crassula peploides

Section IX Acutifolia (Schonl.) Tölken

Type species : *C. acutifolia* Lam.

Perennial plants, leaves fleshy, usually subulate and papillose, flowers tubular.

Distribution : Widespread throughout South Africa and into south-east tropical Africa.

Species :

Crassula biplanata

Crassula ericoides (ssp. *ericoides*, ssp. *torulosa*)

Crassula dependens

Crassula planifolia

Crassula sarcocaulis (ssp. *rupicola*, ssp. *sarcocaulis*)

Crassula tetragona (ssp. *acutifolia*, ssp. *connivens*, ssp. *lignescens*, ssp. *robusta*, ssp. *rudis*, ssp. *tetragona*)

Section X Squamulosae Haw.

Type species : *C. scabra* L.

Perennial plants with more or less woody stems, leaves usually with robust trichomes (hairs) and marginal cilia, inflorescence without distinct peduncle, flowers tubular and with dorsal appendage.

Distribution : Infrequent and widespread in south-western and north-western Cape.

Species :

Crassula muricata

Crassula pallens

Crassula pruinosa

Crassula pustulata

Crassula rudolfii

Crassula scabra

Crassula whiteheadii

Section XI Subulares Haw.

Type species : *C. ramosa* Thunb.

Perennial plants with woody stems, leaves linear to oblong, glabrous but with marginal cilia, inflorescence a thyrsse with an often indistinct peduncle, flowers tubular, petal tips usually recoiled, indistinct appendage.

Distribution : Widespread in winter rainfall area from near Port Elizabeth along southern and south-western Cape mountains to the Gifberg in the north.

Species :

Crassula ciliata
Crassula cymosa
Crassula lasiantha
Crassula multiflora (ssp. *leucantha*, ssp. *mulltiflora*)
Crassula subulata (var. *fastigiata*, var. *hispida*, var. *subulata*)

Section XII Curtogyne (Haw.) Tölken

Type species : *C. undata* Haw.

Perennial plants with woody stems, leaves glabrous but with marginal cilia, inflorescence a thyrsse with an often indistinct peduncle, flowers tubular, 5 – 9 mm long, petals membranous, acute and with appendage.

Distribution : Northern, Western and Eastern Cape.

Species :

Crassula dejacta
Crassula fallax
Crassula flava
Crassula rubricaulis

Section XIII Kalosanthes (Haw.) Tölken

Type species : *K. jasmina* (Sims) Haw.

Perennial plants with fleshy and more or less woody stems, leaves glabrous but with marginal cilia, dorsiventrally flattened; inflorescence a capitate thyrsse with an often indistinct peduncle, flowers tubular, petals 20 – 60 mm long, apex spreading at right angle, with dorsal appendage.

Distribution : Mountainous areas of south-western Cape.

Species :

Crassula coccinea
Crassula fascicularis
Crassula obtusa

XIV Section Rosulares Haw.

Type species : *C. rosularis* Haw.

Largest section of the genus. Mostly perennial plants, stems short or none, but elongating when flowering, leaves in basal rosettes which often offset, leaves flat and acute, glabrous to densely hairy, margins often with recurved cilia. Inflorescence a thyrsse, rarely with a distinct peduncle, mostly the vegetative branch is grading into the inflorescence with the leaves gradually getting shorter below the inflorescence. Flowers tubular, petals papillose and with distinct appendage.

Distribution : Widespread in southern Africa, particularly in south-eastern Cape region.

Species :

Crassula acinaciformis
Crassula alba (var. *alba*, var. *pallida*, var. *parvisepala*)
Crassula barbata (ssp. *barbata*, ssp. *broomii*)
Crassula brachystachya
Crassula capitella (ssp. *capitella*, ssp. *nodulosa*, ssp. *sessilicymula*, ssp. *meyeri*, ssp. *thrysiflora*)
Crassula compacta
Crassula cremnophila
Crassula cymbiformis
Crassula exilis (ssp. *cooperi*, ssp. *exilis*, ssp. *sedifolia*)
Crassula flanaganii
Crassula hemisphaerica
Crassula intermedia
Crassula luederitzii
Crassula montana (ssp. *montana*, ssp. *quadrangularis*)
Crassula natalensis
Crassula obovata (var. *dregeana*, var. *obovata*)
Crassula orbicularis
Crassula pseudohemisphaerica
Crassula sediflora (var. *amatolica*, var. *sediflora*)
Crassula setulosa (var. *deminuta*, var. *jenkinsii*, var. *longiciliata*, var. *rubra*, var. *setulosa*)
Crassula smithii (ALOE 45 :4 :2008)
Crassula socialis
Crassula southii (ssp. *southii*, ssp. *sphaerocephala*)
Crassula tabularis
Crassula tomentosa (var. *glabrifolia*, var. *tomentosa*)
Crassula vaginata (ssp. *minuta*, ssp. *vaginata*)

Section XV Perfilatae Haw. ex DC.

Type species : *C. perfossa* Lam.

Perennial plants with slightly woody stems, leaves robust, partly fused at base, young leaves with marginal cilia. Inflorescence with a distinct peduncle, petals more or less papillose and often with dorsal appendage.

Distribution : South Namibia, Northern, Western and Eastern Cape.

Species

- Crassula badspoortensis
- Crassula brevifolia (ssp. brevifolia, ssp. pasmmophila)
- Crassula fusca
- Crassula macowaniana
- Crassula perforata (ssp. kougaensis – ALOE 46:1:2009)
- Crassula rupestris (ssp. commutata, ssp. marnieriana, ssp. rupestris)
- Crassula sladenii

Section XVI Columnares Haw. ex DC.

Type species : *C. columnaris* Thunb.

Perennial or biennial plants, stems scarcely woody, leaves more or less adpressed to the stems; leaves rarely without marginal cilia, partly fused at base; inflorescence without peduncle, a thyrsus with a head-like cluster of flowers; petals narrowly oblong canaliculate, apex rounded or hooded.

Distribution : Mainly in winter rainfall areas of the Succulent Karoo in Northern and Eastern Cape.

Species

- Crassula alpestris (ssp. alpestris, ssp. massonii)
- Crassula barklyi
- Crassula columnaris (ssp. columnaris, ssp. prolifera)
- Crassula congesta (ssp. congesta, ssp. laticephala)
- Crassula multicaps
- Crassula pyramidalis

Section XVII Argyrophylla (Schonl.) Toelken

Type species : *C. argyrophylla* Diels ex Schonl.

Perennial plants with short erect branches, rarely longer than 20 cm, often with woody base, usually covered with hairs or papillae as are also the leaves, which are partly fused at base. Inflorescence an elongated thyrsus with one to several dichasium, with or without a peduncle. Sepals densely hairy; flowers tubular, with or without appendage.

Distribution : Common in Namaqualand and adjoining areas but also in the eastern Cape Province.

Species :

- Crassula alstonii
- Crassula aurusbergensis
- Crassula ausensis (ssp. ausensis, ssp. giessii, ssp. titanopsis)
- Crassula decidua
- Crassula garibina (ssp. garibina, ssp. glabra)
- Crassula globularioides (ssp. globularioides, ssp. illichiana)
- Crassula hirtipes
- Crassula lanuginosa (var. lanuginosa, var. pachystemon)

Crassula leachii
Crassula mesembrianthemopsis
Crassula morrumbalensis
Crassula namaquensis (ssp. *comptonii*, ssp. *lutea*, ssp. *namaquensis*)
Crassula sericea (var. *sericea*, var. *hottentotta*, var. *velutina*)
Crassula susannae
Crassula swaziensis
Crassula tecta
Crassula zombensis

Section XVIII Arta (Schonl.) Toelken

Type species : *C. arta* Schonl.

Perennial plants with short spreading branches rarely longer than 15 cm, glabrous, hairy or covered with papillae as are also the leaves which are partly fused at base, flat above but very convex below. Inflorescences usually a round-topped thyrses more or less divided into dense dichasias at the end of the branches, with peduncles 3-15 cm long. Flowers tubular, petals only 3 mm long, recurved at apex, with dorsal appendage.

Distribution : Southern Namib desert and Northern and Western Cape.

Species :

Crassula columella
Crassula deceptor
Crassula elegans (ssp. *elegans*, ssp. *namibensis*)
Crassula grisea
Crassula marchandii
Crassula plegmatoides

Section XIX Crassula Toelken.

Type species : *C. perfoliata* L.

Perennial plants with erect branches up to 1,5 m tall, robust, woody, covered with coarse rounded papillae as are also the leaves which often are falcate, partly fused at base. Inflorescence a thyrses, peduncle distinct, flowers arranged in dichasias. Sepals covered with spreading hairs and with marginal cilia. Flowers tubular, with dorsal appendages.

Distribution : Widespread from south-eastern Cape region to south-eastern tropical Africa.

Species :

Crassula perfoliata (var. *coccinea*, var. *heterotricha*, var. *falcata*, var. *minor*, var. *perfoliata*)

Crassula XX Globulea (Haw.) Harv.

Type species : *C. cultrata* L.

Perennial plants, stems often woody, erect or decumbent, up to 60 cm long, or very short and with a basal rosette and a fleshy stem; leaves often falcate, partial fusion of the base. Inflorescence a rounded thyrsse with several dichasias, peduncle 3 – 40 cm long. Sepals often hairy and with marginal cilia, corolla tubular to urceolate, almost not opened, with pronounced dorsal appendages.

Distribution : Widespread in Northern, Western and Eastern Cape, Free State, KwaZulu-Natal and South Namibia.

Species :

Crassula ammophila

Crassula atropurpurea (var. *anomala*, var. *atropurpurea*, var. *cultriformis*, var. *purcellii*, var. *rubella*, var. *watermeyeri*)

Crassula clavata

Crassula cotyledonis

Crassula cultrata

Crassula lactibracteata

Crassula mesembryanthoides (ssp. *hispida*, ssp. *mesembryanthoides*)

Crassula mollis

Crassula nudicaulis (var. *herrei*, var. *nudicaulis*, var. *platyphylla*)

Crassula pubescens (ssp. *pubescens*, ssp. *radicans*, ssp. *rattrayi*)

Crassula rogersii

Crassula subacaulis (ssp. *erosula*, ssp. *subacaulis*)

Crassula subaphylla (var. *subaphylla*, var. *virgata*)