# Hottentot-Fig, Carpobrotus edulis



# Overview

# Short description of Carpobrotus edulis, Hottentot-Fig

Description of Carpobrotus edulis, Hottentot-Fig status in GB

A mat forming succulent perennial with procumbent woody stems. These stems can extend up to 3m trailing over cliffs and walls. Leaves are triangular in cross section and the solitary flowers are either yellow, pinkish purple or pink with yellow bases.

GB Distribution from <u>NBN Gateway</u>

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Intentot-fig is invasive along coastal areas, particularly in the south west, where it competes with the native flora. In the native distribution it can be found on coastal dunes, sands, shingles, rock cliffs, ledges, inland cliffs, rock pavements and outcrops. A species of arm temperate to dry climates. Grows on well drained, acid to alkaline or saline soils.	
Species status:	Non-Native
Native range:	Southern Africa
Functional type:	Land plant
Status in England:	Non-Native
Status in Scotland:	Non-Native
Status in Wales:	Non-Native
Location of first record:	v.c.113 (Guernsey)
Date of first record:	1886

# Invasion history: Carpobrotus edulis, Hottentot-Fig

Origin Native to South Africa.

# First Record

Was cultivated in gardens by about 1690 and first recorded wild in GB in 1886.

# Pathway and Method

Introduced into GB as an ornamental garden plant. It has also been used to stabilise dune systems.

# Species Status

Is now widely naturalised and invasive in the Mediterranean-Atlantic regions of Europe, north to Germany, Britain and Ireland. Also considered an invasive alien in North America and Australia where it hybridises with native Carpobrotus species.

# Ecology & Habitat: Carpobrotus edulis, Hottentot-Fig

## **Dispersal Mechanisms**

In its introduced range spread has largely occurred by the inappropriate dumping of garden waste. Natural vegetative spread occurs via the fragmentation and dispersal of stems. This is facilitated by the activities of rabbits and nesting birds. As a result uninhabited islands have become colonised. Fruits are animal dispersed and seed germination enhanced by ingestion of the fruit.

#### Reproduction

Flowers are insect pollinated by beetles, flies, bees and butterflies. Although sexual reproduction occurs the role of seed is considered to be insignificant compared to that of vegetative reproduction

#### Known Predators/Herbivores

Seedlings are eaten by mammals; this can result in high mortality rates. Once seedlings have established, however, they are not affected by herbivory or predation. Various insects and rodents will eat the seed.

#### **Resistant Stages**

Seeds remain viable in the soil for at least two years, while uneaten fruits can remain on the plants for several years forming an above ground seed bank

#### Habitat Occupied in GB

A species of sea cliffs, sand dunes, coastal banks, rocks and walls. Its distribution is largely determined by climate. Being frost sensitive it favours the milder climatic regions of Britain and therefore it is predicted to increase its distribution with current climate change scenarios.

# Distribution: Carpobrotus edulis. Hottentot-Fig

Mainly distributed in the south west; the Channel Islands, Scilly, Cornwall to North Wales and East Sussex, with scattered populations elsewhere.

# impacts: Carpobrotus eduns, nottentot-rig

#### Environmental Impact

Hottentot-fig rapidly produces a monoculture at sites which prevent the growth of native species. It has been shown to acidify the underlying soil and alter the soil's nutrient dynamics. Infestations on sand dunes can stabilise the sand to such an extent that the natural dynamics of the dunes can become affected. Species that require sand disturbance, for example, could be lost from such sites.

### Health and Social Impact

None known.

#### Economic Impact

Removal of the plants from small patches that are readily accessible is relatively cheap, however, from, for example, cliff sites considerable costs can be incurred where specialist equipment, climbers, training and insurance is required.

# Legislation: Carpobrotus edulis, Hottentot-Fig

Listed under Schedule 9 of the Wildlife and Countryside Act in England and Wales.

# References & Links: Carpobrotus edulis, Hottentot-Fig

#### Identification

Clement, E.J., & Foster, M.C. (1994) Alien plants of the British Isles. London: Botanical Society of the British Isles.

Stace, C. (2010) New Flora of the British Isles. Third edition. Cambridge

# Biology, ecology, spread, vectors

Preston, C.D. (1988) The Aizoaceae naturalized in the British Isles. Watsonia, 17, 217 – 245. http://www.watsonia.org.uk/Wats17p217.pdf

Preston, C.D., Pearman, D.A. & Dines, T.D. (2002) New Atlas of the British and Irish Flora. Oxford University Press

# Management and impact

Invasive species action plan - Ireland http://www.invasivespeciesizeland.com/files/public/Management%20contingency/Carpobrotus%20edulis%20Invasive%20Species%20Action%20Plan.pdf

DAISIE website database

http://www.europe-aliens.org/speciesEactsheet.do?speciesId=7190#

General WIKIPEDIA http://en.wikipedia.org/wiki/Carpobrotus\_edulis.

On Line Atlas of the British and Irish Flora - online resource available from http://www.brc.ac.uk/plantatlas/index.php?g=plant/carpobrotus-edulis