Plant Heritage
CONSERVING THE DIVERSITY OF GARDEN PLANTS

INTRODUCTION

Aeonium (Greek aionion...meaning 'always alive') is from the stone crop family *Crassulaceae. Aeonium* were first recorded in the UK by Mary Capel, The Duchess of Beaufort (1630-1715) in Somerset. She recorded three *Aeonium* in her book 'Florilegium at Badminton' a collection of beautiful watercolour paintings of her botanical collection. Originally *Aeonium* were thought to be giant sempervivums until 1836 when Webb and Bethelot elevated *Aeonium* into its own genus. There are some 40 known species, and so there is still much to learn, with some species still under question.

ORIGINS

So, where do *Aeonium* come from? They come from what is known as the Macaronesian Islands, the Canary Islands being the most *Aeonium* rich, but others occur on Madeira, Cape Verde islands and there is even a disjunct distribution in East Africa and the Yemen. The majority are endemic to the Canary Islands, a beautiful, volcanic archipelago of islands in the Atlantic Ocean off the west coast of Africa. The islands belong to Spain, Mount Teide on Tenerife being the highest mountain (volcano) under the Spanish flag! Fascinatingly each Canary Island, with the exception of Fuerteventura, has its own individual species.

The volcanic nature of the islands provide what is known as a ***xerophytic*** environment, meaning plants have to adapt and survive in an environment with little water, as much of the islands are hard volcanic rock. However, *Aeonium* species can be found in almost all habitats of the islands, including the dry hot succulent zone, the dry pine tree forests, the moist evergreen laurel 'cloud' forests and finally the punishing subalpine zone some 2,200 m high on Mt Teide, Tenerife.
Of the six islands, the more mountainous the island the more diverse it is, meaning more species. This is called ***adaptive radiation*** and explains how a single species can evolve into a number of species which have adapted to different environments within each island. *Aeonium* species are quite diverse despite their environments. Some plants can be astonishingly large growers - to over two meters high, not including the flowering stalk which can add another metre! Many of these large growers are ***monocarpic*** meaning they only flower once and then the plant dies, leaving behind masses of microscopic seeds. The flowers, commonly known as the ***inflorescence***, are usually bright yellow, pink or white with the exception of *A. nobile* which flowers a bright brick red.

The inflorescences are beloved by bees and are pollinated thus so. However, *Aeonium* are also pollinated by little lizards that inhabit the environment - as they scramble and scurry over the plants in search of a meal, their little feet carry pollen from one flower to another. The size of *Aeonium* leaves vary from just 10mm in *A. sedifolium* to 600mm long in *A. nobile*. Not all aeoniums have just one stalk, some don't have a stalk at all, others are bushy, some tree-like hence the word 'arboreum' is used in their naming. Many species of *Aeonium* are endangered in the wild primarily due to loss of habitat and climate change.

CULTIVATION

Over the last few years *Aeonium* have become much more popular with many attractive cultivars being grown; notably in the USA and Australia where they can be grown all year round in the garden, tolerating long periods of drought and making them a 'must have' in areas similar to their origins. The darker leaved varieties, of which there are now many, are very popular mainly thanks to the late John (Jack) Caitlin who died in 2008 at the age of 89. His work at Huntington Botanic Gardens, USA has given us many dark leaved varieties like *A*. 'Cyclops', 'Voodoo', 'Blushing Beauty', 'Plum Purdy' and 'Velour'; these are now being crossed to produce even more cultivars. *Aeonium* have become increasingly popular as house plants in the UK and British growers are producing some gorgeous cultivars of their own.

PROPAGATION IN CULTIVATION

Stem cutting is the easiest method of *Aeonium* propagation and is achieved by taking a stem-cutting and planting directly into a potting mix. However, stem cuttings benefit from a period of 'callousing' which involves keeping the cutting dry and exposing it to air, which hardens the wound. Once calloused (it can be left for up to two weeks), it can then be planted in a pot of moist compost and left in a cool shady area, free from wind until it sets root. In the UK it is best to take cuttings like this in spring and autumn. In the UK, *Aeonium* need winter protection in a cool, frost free environment, a greenhouse is best, but with good air circulation. During the summer month they will be most happy outdoors.

Leaf cuttings can work, but not all *Aeonium* are suited to this, but it is worth a go as it is less invasive to the mother plant. Leaves should be placed flat onto a damp compost mix in a tray and kept dry for two or three weeks. If you are lucky, roots will appear from the base of the leaf, then they can then be potted on.

From seed: in a seed tray, place two thirds seed compost, then a thin layer of grit or alpine gravel. Sow the seed, which is extremely fine and difficult to broadcast, over the grit/gravel and sprinkle gently with water. This will enable the seed to settle between the stones and germinate. Cover the tray with a clear lid, do not block light. They need a moist environment to germinate but once you see the seedling appear remove the cover. The seedlings will be held in place by the grit/gravel and this will also help prevent roots drying out. Once seedlings are big enough to handle, carefully lift and pot on.

PESTS

Mealy bug - clusters of cotton wool bud like aphids (control with seaweed spray).

Vine weevil - hidden in soil, the grubs eat away at stalks and roots. Adult beetle will emerge and eat away at leaf rosettes (control with diligent removal at evenings and night-time).

Tortrix moth - caterpillars also thoroughly enjoy eating leaf rosettes. (control by removal).