Cacti



Introduction

Cacti are native to the Americas and occur from the southern parts of Canada right down to the tip of Patagonia. The plants live in many different types of terrain from arid mountain semi-desert, through grassland to forest scrub land and even in rain forests. They vary in size from the giant Saguaro (Fig. 1), some sixty feet high, to the tiny Blossfeldia, barely a centimetre across (Fig. 2). They vary in shape from solitary globes, through clustering heads and chains of flat or cylindric pads to tall columns. Some even hang down from cliff faces.

Spines vary from long to short and may be straight or hooked (Fig. 3). Spines are modified leaf structures. They act as collecting points for the morning dews to condense, feeding moisture to the ground and the roots of the plants. With such a range of shape, size and spination, it is no wonder these weird and wonderful plants attract attention. What really fascinates growers is the array of flowers. Their colour, size and shape are second to none in the plant kingdom (Fig. 4).

Cacti are distinguished from other succulents by the presence of cushion-like growths called areoles, from which spine clusters, flowers and side shoots develop (Fig. 3).

The majority of cacti have a fibrous, a spreading root system which reacts guickly to water. Water swells their ribbed bodies like a concertina to store this precious commodity. Some cacti have tap roots, swollen structures which anchor them to the ground and store any moisture available.

Cultivation

Cacti require good light for healthy of growth. The quality of spination and the number of flowers are related to the amount of light they receive. However care must be taken in early spring when a day of very bright sunshine after the dull weather of winter can cause burning. To prevent this, ensure that



Fig. I The giant Saguaro (Carnegiea gigantea)







Fig. 2 The tiny Blossfeldia (liliputana)







Fig. 3 Spines and spine clusters – forms, shapes and colours: 3a the golden hooked spines and many white radial spines of Mammillaria moelleriana, 3b the fine straight, white spines with no clear central spine of Rebutia senilis, 3c the erect brown central spines and white radial spines of Echinofossulocactus zacatecasensis, 3d the brightly coloured radial spines wrapped tightly round the plant body and no central spine of Echinocereus rigidissimus ssp. rubispinus and 3e Lophophora williamsii with soft white wool only

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Fig. 4 The wonderful variety of cactus flowers and spines: 4a Rebutia narvaecensis with pink and white flowers and short fawn and white spines, 4b Sulcorebutia hertusii with deep pink flowers and brushy white spines, 4c Rebutia hoffmannii with bright orange flowers and short white spines, 4d Mammillaria hahniana with deep pink flowers, pure white spines and soft wool, 4e an Echinopsis hybrid with enormous multi-hued flower and gingery spines, 4f Copiapoa laui with bright yellow flowers, brown plant bodies, tiny fawn spines and white wool, 4g Matucana madisoniorum white-flowered form, spineless and with white wool and 4h Escobaria minima with mid-pink flowers and attractive yellow spine clusters

ventilation is adequate and if possible increase air movement by the addition of electric fans. Alternatively light shading can be applied. Horticultural grade bubble-wrap is a good way of providing light shading and also gives excellent insulation in winter.

In general a winter temperature of about 5°C is ideal although some cacti such as *Tephrocactus* will survive happily at lower temperatures, even below freezing if dry. Most cacti will overwinter quite happily if kept at slightly above 0°C. Cacti that require a higher temperature such as *Melocactus* can be brought inside the home for the winter unless a heated propagator is available.

The compost should always be kept dry during the winter period (except for cacti kept warm in the house, like the Christmas cactus).

When new growth or flower buds appear, usually in late March, this is the time to begin watering, preferably on warm, bright mornings. Continue regular watering throughout the summer until early October. Feed regularly with any balanced fertiliser with trace elements, such as one suitable for growing tomatoes, which will improve spination and flowering. Always allow your plants to dry out from the previous watering and never allow them to stand in water for more than the short time needed to allow them to draw it up from the base.

Sources of supply

Plants can be obtained from specialist nurseries, florists, supermarkets and garden centres. From these sources, the range may be limited, but they usually offer easyto-grow species. Preferably though, head for a cactus nursery (see CactusWorld or the BCSS website for nursery adverts), or your local BCSS branch or cactus show where you can pick up special and well grown plants plus a wealth of information. Many cacti are also easy to raise from seed, and the Seed Raising information sheet gives details of how to do this and where to obtain seeds.