

### 13. ROCKERY IX



This feature runs in a North-South direction from near the Western end of Rockery VIII. It is a small feature, 21 meter long and about 11 meters wide at the middle. On this feature are grown plants belonging to the collection of the late SHRI O. P. BANSAL, who was a keen plant grower. For several years he was associated with the Rose Society of India. In his later years he took to growing cacti. He expired in 1994, when he was actively involved in the activities of the National Cactus and Succulent Society of India, Chandigarh. After his sudden death in 1994 the family expressed the desire to donate the plants to this Garden. So after building Rockery VIII for MR. G. C. JAIN, this rockery came into being. MR BANSAL had a small collection, but quite a large number were big

specimen plants. Most remarkable were three mature plants of *Melocactus maxonii* with large cephalium, big groups of *Coryphantha elephantidens*, and several large *Ferocactus herrerae*. Out of the three big *Melocacti*, one still survives near the Northern end. The others did not survive long. Now several younger plants have been planted alongside this specimen. Starting from the Northern end there is an *Agave americana* variegated plant. In the background of this rockery there are several large *Ritterocereus pruinosus*, *Yucca aloefolia*, *Kalanchoe behariensis*, *Aloe arborescens* and some *Agaves*. There are three *Opuntia mamillata* fa. monstrose plants on this feature. A large *Espostoa lanata* is near the Northern end. There is a larger plant of *Napolea cochenillifera*. There is one group of *Echinocereus procumbens*. There are groups of *Coryphantha elephantidens*, *Mammillaria magnimamma*, *Mammillaria mazatlanensis* and *Mammillaria beneckeii*. There are two small groups of *Tephrocactus* species as well. As mentioned earlier MR. BANSAL had several *Ferocactus herrerae* plant. Now some of these are seventy-five cm high. There are plants of *Ferocactus glauscensis* and a large group of big *Astrophytum ornatum* plants as well. At the Southern end is a big tree of *Bursera hindsiana*. This tree has been trained in topiary style. The thick trunk and shiny undulating branches with

terminal pads of foliage forms an attractive sight. In the middle in front, a marble slab honours this generous grower SH. O. P. BANSAL.



## 14. ROCKERY X



This is a small rockery about one meter high. It runs in a north-westerly to south-easterly direction. It is only nine meters long and four meters wide. It runs parallel to one of the sides of the large octagonal glass house behind it. In front across the paved path is a cluster three small low rockeries X a, Xb and Xc.

Rockery X has a small number of large cacti and succulents. Near the Northern end is a large *Agave victoria-reginae* and three large *Ferocacti*. The most impressive is a large about 60 cm high *Ferocactus potsii* var. *alasomanus*. This *Ferocactus* came to me from CHARLES GLASS. Next to it is a large about 50 cm diameter *Ferocactus herrerae* and just behind it a *Ferocactus covellei* of the same size. At the back are a group of *Sansevieria*

and a two and a half meter high *Consolea rubescens* plants. Also completing the backdrop are a couple of *Cereus peruvianus*, three groups of *Aloe arborescens*, a large *Opuntia* species plants. A large branching *Espositoa lanata* plant is in the middle in front of the large *cerei*. A group of ten large *Echinocactus grusonii* fills up most of the top. *Mammillaria nivosa*, *Mammillaria magnimamma*, *Mammillaria haageana*, and a couple of other species are spread over this feature. At the Southern end is a large *Adenium obesum* var. *multiflorum*. This was grown from seeds sent to me from Kenya. Though the plant is very impressive, it is a very shy bloomer.

## ROCKERY X A



This small rockery was developed mainly to study the growth behaviour of Indian species of Genus *Caralluma*. Previously these plants were mainly grown on Rockery II described earlier. On that feature we find it difficult to maintain these plants for long. On these rockeries it was planned to give them more intensive care with regular fertilizing. During the first year of the establishment of these rockeries it was noted that these plants flourish under intensive care and within a year very large robust groups were developed. But during the second and third years the winters were very severe and that resulted in extensive rotting of several species. *Caralluma bhupenderiana* (two clones), *Caralluma carinata* (two clones),

*Caralluma geniculata* (one clone), *Ferera indica*, *Caralluma attenuata* (one clone), *Caralluma sarkariae* (one clone) and *Caralluma adscendens* (one clone), *Caralluma fimbriata* (two clones), *Caralluma gracilis*, and *Caralluma umbellata* survived the rigours of winter. *Caralluma indica*, *Caralluma truncato-coronata* and several clones of the above mentioned species did not survive. In future to preserve these species, several clones of all Indian species of *Caralluma* will have to be moved into glasshouses during winter and brought out during the summer. Rockery X A has most of these Indian species of *Caralluma*.



Several species of *Haworthias* were also planted on X A. Most of them show robust growth. *Tylecodon paniculata* plants were not showing

good growth under the glass. Two plants of this species on this rockery have shown robust growth in the very first year, with one of the plants coming into flowers as well. A plant of *Dyckia marnier-lapastole* has also been planted. It has shown robust growth with flowering. We have been able to collect a few seeds of this species. We had received three small plants of *Fouquieria columnaris* (Boojum Trees) from MESA GARDENS, New Mexico, U.S.A. These were small plants with three to four cm long tubers, and three to four thin fifteen to twenty cm long leafless branches. They were kept in the glass house, where they survived but did not show any worthwhile growth during the first summer. One of these was planted on this rockery. It did not show much growth during the first six months but has now picked up robust growth with about fifteen to twenty long leafy branches.

## ROCKERY X B



This again has been developed as an experimental rockery for difficult plants. Three, most difficult to grow, species of Indian *Carallumas*, i.e., *Caralluma bhupenderana*, *Caralluma geniculata* and *Frerea indica* have naturalized on this rockery. Two groups of *Caralluma fimbriata*, *Caralluma carinata* and one clone of *Caralluma attenuata* are also grouping vigorously. Two clones of *Caralluma edulis* also established here. One of the National Cactus and Succulent Society of India, Chandigarh members, VIJAY KAUSHAL has been looking after the welfare of plants on Rockeries X A

and X B. He is a keen cactus seed grower. He has planted groups of *Astrophytum ornatum* and *Melocactus bahiensis* on this rockery. There are plants of *Mammillaria compressa* var. *rosea* and *Mammillaria baumi* also on this rockery. Two grafted groups of a hybrid *Lobivia* on a tall stock, provide plenty of flowers during the summer. There are some groups of *Aloe bakeri* in the back. These were used as protection plants for *Caralluma truncato-coronata*. This *Caralluma* has now firmly established under stone protected area on Rockery X A. There are several plants of *Cissus tuberosus* in the backdrop which shows vigorous growth. There is a plant of *Adenium swazicum* near the Southern end. This is showing vigorous growth. A tall *Nolina longifolia* from VIJAY KAUSHAL is at the far end of this rockery.

## ROCKERY X C



This rockery is still under development. Encouraged by the result on X A, the remaining two Boojum Trees have been planted on it. One of these is already showing growth within its first month outdoors. In addition to these plants, several groups of *Mammillarias* and some other cacti are planted on this rockery. There are two very attractive species of *Cephalocereus*, and a tall plant of *Cephalocereus palmeri* in the background. A plant of *Mormodica rostrata* was also planted at the back. It showed rapid growth and developed a thirty cm diameter caudex, but during the winter it developed rot. Now a small tuber has been left. Some *Kalanchoe* and *Euphorbia milii* plants have also been grown, mainly with the objective of partial protection to low growing Indian species of *Caralluma*. . Three large

grafted plants of a clone of very large deep red flowering *Adenium obesum*, and another plant of *Adenium obesum* with purple leaves did not survive harsh winter this year. Several plants of Euphorbia with hybrids give plenty of colours throughout the year.

Two plants of *Fouquieria columnaris* (Boojum Tree) and one *Fouquieria fasciculata* were planted on this rockery. Unfortunately both plants of *Fouquieria columnaris* did not survive through the monsoon rains. A *Cissus* has also been planted. Two species of *Adeniums* i.e. *Adenium bohemianus* and *Adenium swazicum* have also been planted. These plants are a gift from MR. GEORGE MATHAI of Delhi. Some other newer additions will be planted later on this feature.