

5. ↳ Rhizome: at least one complete example of the structural unit, preferably two or more units that show the branching habit of the rhizome (the horizontal, usually underground stem that often sends out roots and shoots). Trim off roots.
6. Flowering branches: although rarely present in bamboos, collect enough to show the habit, leaf arrangement and density, and stages of development. Collect fruits if present, making sure they are not lost (during pressing and drying) because they readily detach from the plant.

Photographs, sketches, and additional notes complement the botanical specimen and are extremely helpful when identifying the plant.

#### **(v) Trees and shrubs.**

As for all plants that are too large to fit onto the herbarium sheet, additional information about the tree or shrub being gathered must be recorded at the time of collection. When collecting trees, the collector's notes should describe the colour and type of bark (e.g. rough, smooth, stringy, or fibrous) and if rough, how far it extends (e.g. over base of trunk only, also on main branches, and/or on fine twigs); sometimes it may be appropriate to collect a wood and bark sample as an ancillary collection. As for other flowering plants, flowers, including flowering buds and fruits, should all be collected if available. Since there may be differences between the types of leaves present on a plant, the collection of adult and juvenile leaves, and sun and shade leaves should be observed and collected if different, or described if any of these cannot be obtained. Since many plants are deciduous, the flowers and fruits may be present when leaves are absent. This should be recorded in the collector's field notes. Each separate stage of the plant's lifecycle can be collected independently and treated as separate specimens, but from the same plant. The bark features may not be as important for the identification of large shrubs, but it is always good practice to record this information at the time of collection.

#### **(vi) Succulents.**

The tissues of succulents and fleshy plants (e.g. cacti, agaves, aloes, bromeliads) usually contain large amounts of water, and some even tend to retain water during the pressing and drying process. There are several techniques used to overcome this problem (Victor et al. 2004):

1. Remove inner tissue: the specimen can be cut longitudinally or transversely so that the fleshy inner tissues can be removed before pressing. This method is used for *Aloe* species and many species of cacti.
2. Hot water/liquid treatment. Submerge the plant material in very hot water or in methylated spirits, petrol or even vinegar. Prior to submersion, pierce material with a needle to allow ready penetration of liquid.
3. ↳ Freezer/microwave: place unpressed material in a freezer for two days and then place in microwave for periods of 5–10 seconds and then check, repeat as necessary until material dried (Leuenberger 1982).

Fleshy flowers can be prepared for pressing and drying by cutting longitudinally, separating the two halves on white card (some prefer moistened gummed paper—Victor et al. 2004), cover with wax paper and enclose in a sheet of newspaper and then press with the remainder of the collection.

There are many excellent references on pressing and drying succulents that should be consulted for detailed information (e.g. De Langhe 1972; Logan 1986; Croat 1985; Griffiths 1907; Jorgensen 1972; MacDougall 1947).