**(i) Ferns.**

It is important to make sure that the specimen being collected is fertile (spore-bearing) (Bridson and Forman 1998). The spores are arranged in sporangia which differ in position and appearance in the various groups of ferns. In the majority of ferns the sporangia occur on the margin or on the lower (abaxial) surface
p. 256 of 'leaves' (fronds). Therefore, specimens must include the sporangia (if ↳ separate from the fronds), or fertile (spore-bearing) fronds and sterile fronds, as well as part of the rhizome (if present) or base of stem (stipe). For tree ferns, a portion of a fertile frond and the base of the frond stalk bearing scales or hairs must be collected.

**(ii) Herbs.**

When dealing with small herbs the entire plant should be collected. Herbs with underground storage organs should be dug up complete with storage organs. However, if the plant is uncommon, make notes on the characteristics of these basal parts, including measurements and drawings, and leave them to shoot again in the following year. This is especially important in the case of orchids and rare species.

**(iii) Grasses.**

Grasses and other plants of grass-like habit, such as sedges and rushes, should be collected whole so as to show the rootstock. Grass clumps may be broken up into small tufts of leaves and flowering stalks; two or three of these tufts should make a satisfactory specimen. All soil adhering to the roots should be carefully knocked off or washed away. Grasses are best collected after the flowers have opened, but before fruits are ready to drop. If the grass specimen is longer than the herbarium sheet (see measurements above), it should be bent once, twice or more so as to form a V, N, or M (according to its length) and pressed in this position. Attempts to bend it after it is dry will probably cause it to break. In the case of exceptionally tall grasses, the flowering parts and a piece of the basal parts should be collected, and a note made of the height and habit.

**(iv) Bamboos.**

Bamboos are variously woody, temperate, or tropical grasses that have jointed and often hollow stems. They can be identified from sterile material (lacking flowers and fruits); however, reproductive structures have traditionally been used for identification purposes.

The parts of the plant that are essential for identification are discussed in Soderstrom and Young (1983) and Womersley (1969). The features include:

1. Culm sheaths: at least two complete sheaths, from about the fifth node from base of culm ('stem') and several mature sheaths from mid-culm nodes. Attach to each of these sheaths a label that records the node from which they were collected. If too large, then cut or fold as necessary. If a sheath cannot be flattened without fracturing, then roll and do not press. However, it is necessary to protect the fragile apex of the sheath by enclosing the rolled sheath with paper.

2. Leafy twigs: include large and small leaves, both young and old. Since the leaves often begin to 'curl' soon after collecting, it is advisable to press the leaves as quickly as possible.

3. Section of branch: at least one typical section of a branch (15–18cm long) from about half-way along culm.

4. Culm nodes and internodes: a segment of mature-sized culm, including the fourth and fifth nodes above the ground.