Bamboo Shoots
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Name: Bambusa sp, Dendrocalamus sp, Gigantochloa sp. (Poaceae).

Common Name: Clumping bamboo.

Origin: Most clumping bamboos originated within the moist equatorial and sub-tropical regions.

Distribution: Major production countries are China, Taiwan and Thailand.

Australian Distribution: Commercial plantations are being established along the east coast of Australia from northern New South Wales to north Queensland and the Top End of the Northern Territory.

Preferred Climate and Soil Types: Most clumping bamboos require a tropical or subtropical climate although some are quite cold tolerant. Running or temperate bamboos do not grow well in the Top End of the NT. Well-drained sandy loam to loamy clay soils are preferred. Will not tolerate waterlogged conditions.

Description: Described as a woody grass – family Gramineae. Clumps radiate out from a determinate underground rhizome system. New culms (stems) are produced each growing season at the ends of rhizome axes and their height and diameter increases each season until the optimum for that species and site is reached. The rhizome has a massive fibrous root system, which feeds and anchors the clump.

Varieties: Current recommendations for vegetable shoots in the Top End include:

- Dendrocalamus asper
- Dendrocalamus latiflorus
- Gigantochloa atter
- Bambusa oldhamii

Shoots can vary greatly in size, colour, texture and bitterness. Market requirements need to be determined before selecting a species for planting.

Culture: Spacing for commercial plantings can vary between four and six metres depending on species and always allow for machinery access. Organic mulching and frequent applications of high nitrogen fertilizer are recommended. Irrigation is applied with mini – sprinklers during the dry season. With adequate water, clumps grow vigorously and continuously during establishment (1-2 years), producing new shoots during the wet and dry season.

After this establishment phase, when the clump rhizome has sufficiently developed, shoot production stops during the dry season regardless of irrigation. The clump then commences the well known yearly growth pattern of extending its network of rhizome axes by producing shoots during favourable environmental conditions (high temp, high rainfall and humidity) and entering a dormant phase each cool dry season. Yearly thinning of 3-year-old culms is a management requirement to maintain clump vigour and allow easy access for shoot harvest.
**Pests and Diseases:** Pests such as scale insects and leaf rolling caterpillars can be present but neither appears to adversely affect the recommended species.

**Shooting Season:** With mature clumps the start of shooting coincides with the onset of the wet season. Generally starting November/December and running through to February/March.

**Harvesting:** Shoots are cut with a sharp flat blade, wide enough for the diameter of the shoot. Care is needed to cut through the base of the shoot and not the rhizome neck. The soft tender texture of the shoot cuts easily. Shoots would be cut twice a week just as they emerge from the mulch layer around the clump. It is important to leave some shoots to grow into culms to maintain clump vigour.

**Storage Conditions:** Fresh bamboo shoots are very perishable. Storage at 5 to 8°C with high humidity will prolong shelf life.

**Culinary Use:** Remove the outer leaf sheaths of the shoot to leave the meat. This is about 50% of the fresh shoot weight. Cut the meat into segments and boil/simmer in salty water for 15-20 minutes to remove bitterness. The level of bitterness varies with species. Prepared shoots can be used immediately in cooking or stored in a plastic bag in the fridge. Use in stir fry dishes or salads.

Refer to Bamboo Shoot Preparation Information Sheet – IO10.