## **Anthurium Commercial Growth, nearest Natural Growing Way**

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#### Another way to grow anthuriums

Brazilian anthurium growers are following anthuriums asks, to improve anthurium cultivation. Different ways of cultivation have been used in Brazil since the beginning of grows for cut flowers, since vitro propagated young plants, in 1994. More than no use or use of chemicals, simple methods have been installed, based on physiological behavior of anthuriums. Some of these needs, are perceptible in flasks, in nursery, in nature, and also in commercial grows. The choice of materials used in grows of cut flower, depends on costs, availability, and are different in function of region and costumes of growers. We observe that new growers, can follow easier theses new techniques. The use of theses techniques, used by organic agriculture, can help growers to improve production and quality, even if they prefer keep their costumes with chemicals.

#### **Anthurium cultivation place**

The best place is near a source of fresh air from a forest, bushes, or little river.

# **Analysis**

Verify if there is a history of plagues or diseases, relative to the place where the growing may be planted. Send to special laboratories, samples for analysis: of residue (metal), chemical, and nematodes for water and earth

(eventhough, no nematodes attack have been registered over the last 15 years, with IAC brazilian anthuriums varieties ).

### Construction\* (preparation) of the growing horizon [photos a,b,c,d,e] Fixation, drainage and water retention

Establish a layer of 15 centimeters above soil, covering all the growing area, to give a structure allowing fixation of new roots upon the upper part of this layer, and at the same time allowing draining water in the dawn part of this layer. For that, branches of trees (not necessarily in decomposition), sawdust from sawmills (lath and joists) leaves of coconut, and so on. Put beside young plants, branches to offer a surface for durable fixation (see photo) and if possible, burned so that the charcoal can be used as a refuge for microorganisms during rainy season.

To stock water, you could introduced in the structure described above: napier, shredded sugar cane, bambu leaves, cutted grass, bark, sawdust, etc...

This plantation has been established inside what was once a building for chicken farming (the ground covered by concrete).



- **a** 6 months after planting in pine bark mixture,
- **b** and after more 11 months of growing: spaces have completed below with large wood material, and upon with small barks (5 to 15 cm of diameter).

#### Behaviour of root sistem







- **f** Roots in fault of fixation
- **g** The root goes down to take
- **h** The root and ramp at the same level possibility to grow in rows.

This plantation has been established, with shade protection, upon a excessive damp soil, with 30 cm of material (as described in construction\*). No irrigation has been done in this area, placed beside rainforest.





**c,d,e**: This growing only use manure as fertilizer, and shows passage and place of planting at the same lewel. Plantation in rows: the sides will meet and the bed will not show anymore; the ground will be entirely covered as well as the inbetween paths.

# Another way to manage the cultivation or environment by order of importance

Water, Fixation, Oxigen for roots, Temperature, Light, Air/ ventilation of foliage, Analysis, Feeding elements.

#### Watering

Watering is manual or by sprinklers upon foliage. To save water, a drip or microaspersion system are sometimes used.

### **Nutritional elements**

Manure can replace or complete the following elements: vegetal charcoal, ashes, fish emulsion, sulfur, bio mineral product from fermentation, humus, rock powder, silicium.