PLANNING YOUR FREE, YEAR ROUND FRUIT/HERB PRODUCTION

<u>PURPOSE:</u> This handout is supplied to assist you to plan your fruit and herb production in a semi tropical environment. Effective planning requires a basic understanding of a wide range of herbs and fruits.

<u>CONSIDERATIONS:</u> Factors such as soil type and depth, soil fertility, susceptibility to frost, susceptibility to flooding, exposure to grazing animals, irrigation water quality and availability, rootstock and variety selection, species selection and soil enrichment will all affect plant growth in various ways. In addition residents will have specific priority areas which are equally important. When in doubt, call us!

KEY CONSIDERATIONS: To assist with the critical planning process the following points are relevant:

- (a) Soils most soil types are suitable for fruit and herb growing. Where surface drainage is restricted during prolonged wet periods, any opportunity to assist surface water to flow away from trees/herbs will be beneficial. Fruit vary in their ability to withstand soil water-logging so this understanding is important when planning an orchard.
- **(b)** Frosts frosts occur in most areas but the frost height is the Critical Factor where susceptible species are grown. In general, low lying areas will experience more frost than hills. As most frosts in NE NSW and SE Queensland will be very mild (i.e. affect the 10-20 cm above ground level), protection of frost susceptible young trees in the first year after planting overcomes most frost challenges. Deciduous and other frost tolerant trees can be given priority for establishment on lower slopes where frosts are more likely. If frosts are likely place 4 stakes approximately 1m high in a 0.5m square around the young tree and surround the sides of the tree with plastic or hessian.
- **(c)** Irrigation Young trees can not be allowed to suffer moisture stress (wilting of leaves) for at least the first 4-6 weeks after planting. As new trees develop an extensive root system moisture will be drawn from a large area of soil so irrigation of well established trees is seldom required.
- (d) Plant Nutrition orchard areas generally require additional fertiliser and/or organic matter to boost early tree establishment and promote quality fruit production. Young trees often delay fruit production until 1-2m high so early growth stimulation results in early fruit production. One way to stimulate rapid growth is to dig a hole approximately twice the depth of the tree bag/pot. Place a closed handful of a complete biological fertiliser in the bottom of the hole and fill the hole to the depth of the tree bag/pot. Pry apart the roots of the tree to stimulate rapid growth prior to planting the tree. Apply another closed handful of the fertiliser blend to the 1sq m around the tree. Wet thoroughly and tread around the tree to ensure roots are in contact with the soil. Continue to apply a closed handful of the fertiliser mix (/ sq m) every 3-4 months until tree is well established.
- **(e)** Insect Pests can be a problem in young trees. Control will vary so contact us for some guidance. Only minimal control is necessary in mature trees. Fruit fly may need to be controlled as stone fruit ripen e.g. beneficial predator insects and or traps.
- **(f) Weed Control** is essential for young trees. A chip hoe coupled with hand pulling is the best method. Chemicals such as Roundup and Glyphosate can be dangerous as any spray drift onto leaves or green stems will result in tree death. Keep your mulch thick around the tree base without the mulch touching the tree trunk.
- **(g)** Mulching improves soil fertility, drainage and moisture/nutrient holding capacity. While most mature trees will not need mulching, straw and or farm manures will benefit shallow soils or very sandy soils. In other words, keep adding organic matter! Be careful to keep mulch at least 10cm from tree trunks to prevent stem rot.

(h) Tree Space Requirements in approximately meter rows – are shown below:-

6m Diameter – Avocado, mulberry, pecan, mango,

5m Diameter – Macadamia nut, fig, custard apple, sour sop, jackfruit, pear

4m Diameter – All citrus, all stone fruit, apple, pear, olive, Lychee, kumquat, Grumi Chama, fig

3m Diameter – Jaboticaba, fig in a hedge, finger lime, Kiwi fruit, dragon fruit, passionfruit

1-2m Diameter – Papaw, papaya, rosemary, chilli, raspberry, grape

- (i) Tree Pruning is not required for most trees. No shoots should be allowed to develop below the graft in grafted trees. Most other trees will need to be trimmed if fruiting branches drag on the ground. Deciduous trees should be pruned in winter to produce a "Hollow Vase" shape with the centre of the vase being kept free of twigs and main outer branches being kept at a uniform height (by winter pruning). This also aids in suitable height for you to harvest fruit.
- (j) Tree Variety/Rootstock Selection is a critical process where assistance is usually required. In coastal areas low chill is a requirement of many species e.g. apple, stone fruit and olives. Rootstock selection is equally important as many varieties of fruit will not thrive on their own roots e.g. citrus, apples and stone fruit.
- (k) Vine Selection requires a fence or trellis. Choices involve passion fruit (3m), kiwifruit (3m for each sex), raspberries (1m), tropical grape (2m), Dragon Fruit (3m).
- (I) Shade is tolerated by most trees but all trees will produce best with a minimum of 6 hours sunlight every day.
- (m) Fruit Harvest Period will vary with location but the following is a guide:-

Fruit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Apple Low Chill											
Pear Low Chill											
Peach Low Chill											
Nectarine Low Chill											
Fig Low Chill											
Plum Low Chill											
Navel - Orange											
Valencia Orange											
Limes (Tahitian)											
Lemons Meyer											
Papaw/Papaya											
Macadamia H2											
Pecans Western											
Lychee											
Passionfruit Panama											
Jaboticaba											
Olive (Frantonio)											
Mango Kensington											
Mango Strawberry											
Custard Apple											·

Avocado Hass							
Avocado Fuerte							
Strawberry	Plant	Autumn					
Mulberry							
Raspberry							
Grape Pink Iona							
Kiwi Fruit							
Chilli Birds Eye/Bell							
Ginger Local Varieties.							
Garlic (Russian)	Plant	Autumn					
Rosemary							
Guava White Indian							
Sour Sop							

For more information

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