

Workflow: Production – Basic Farming Practices

Toolkit 3.2

Cultivars and Rootstock

target audience

Farm owners and managers.

what it is

The decision a farmer makes regarding variety, cultivar and the root stock is critical and will determine production levels, suitability of the choices for the location, ultimate quality, and will also impact the cost of production.

- Type denotes the 4 broad categories of citrus - oranges, soft citrus, grapefruit, and lemons.
- Variety refers to categories within those broad types, e.g., navels or valencias.
- Cultivar refers to the various fruit cultivars within a variety, e.g., Turkey or Bennie valencias.
- Rootstock refers to the stump and root type on which the variety and cultivar you wish to produce is grafted. Rootstocks are used for their robust root system which will serve the productive part (the cultivar) optimally.

why it is important

You are making a significant 20-30-year investment when establishing a new orchard and the choices you make cannot be undone once the trees are planted.

Many factors play into making choices regarding which variety and cultivar you wish to farm, and which rootstock will serve that cultivar best.

success factors

The factors that will inform a successful choice include:

- **Region** – What grows best?
- **Specific Characteristics of that Orchard (topography, soil etc.)** – What will suit your specific farm or orchard best?
- **Market** – Which market am I planning to supply, and do I need to meet certain seasonal demands (e.g. early to market)?

- **Strategy** – How does your choice fit into your overall strategy, the mix on your farm, and ripening/harvest times?
- **Compatibility of Rootstock and Cultivar** – Are you getting the best plant from the nursery, and if you are top working are you certain about the compatibility of your choice.

You may be clear regarding the best choices given your own experience of your region, the particular characteristics, and the market. However, even if only to check the quality of your choices, seeking expert advice before making a 20-30-year commitment would be wise.

execution steps

Know your:

1. Region
2. Farm
3. Market
4. Overall strategy
5. Rootstock and cultivar quality and compatibility.

assessment questions

Please Note: There is no minimum / maximum amount of questions you can add

1.	Are you satisfied with your current rootstocks and cultivars?
2.	Do you have defined plans to introduce or replace new rootstocks and cultivars?
3.	Do you have all the information you require to make well informed decisions regarding new or replacement rootstocks?
4.	Have you tested your thinking and choice of rootstocks and cultivars with a specialist?
5.	Are you clear on the market you wish to serve with regard to your choice cultivars?
6.	If you are top working, have you confirmed the compatibility of your existing rootstock with the new cultivar?

resources

1.	CRI Production Guidelines Volume I: Chapter 6 – Rootstock Choices
2.	CRI cultivar fact sheets
3.	CRI maturity graphs
4.	Citrus Academy AV module – Citrus Type and Cultivars