

# School of Fruit Growing

Fertigation Courses for:

- ◆ Soil Grown Crops
- ◆ Substrate/Hydroponic Crops

## Fertigation Chemistry Course – Soil Grown Crops

A one-day course covering both theoretical and practical aspects of fertigation, in particular the course includes detailed discussion on the interpretation of laboratory analysis results, live or recorded demonstrations of laboratory tests for pH and EC), a titration workshop to show how much acid is required to neutralise hard waters and an interactive exercise to show how FAST advisors use our feed recipe workbook.

*Those who are relatively new to the practice of fertigation may find it helpful to attend the nutrition and physiology modules of the FAST School of Fruit Growing Top Fruit or Stone fruit courses before signing up to this more advanced course.*

### Detail

1. Physiology revision – roots, water availability and demand (including transpiration, soil water deficit measurement, root pressure, osmosis etc.)
2. Monitoring and system specification – Records, optimum pattern of irrigations and feed dosing
3. Soil types – drainage/air, cation exchange, pH
  - Detail about ions and on pH
4. Feeding plans (1) – elements and ratios
  - Crop requirements
  - Sampling
  - How samples are tested by the FAST laboratory (video or laboratory visit)
5. Solubility and EC practical – group participation
  - When on-site this can be done in the classroom
  - For on-line courses, FAST will send kits to participants for use on the day
6. Feeding plans (2)
  - Session on fertigation planning, interacting with a workbook developed and routinely used by the FAST team

## Fertigation Chemistry Course – Substrate/Hydroponic Crops

A one-day course covering both theoretical and practical aspects of substrate fertigation. This course includes all aspects as detailed for Soil Grown Crops above.

*Those who are relatively new to the practice of fertigation may find it helpful to attend the nutrition and physiology modules of the FAST School of Fruit Growing Strawberry course before signing up to this more advanced course.*

### Detail

1. Physiology revision – roots, water availability and demand (including VPD, soil/substrate water potential, root pressure, osmosis, tip burn etc.)
2. Monitoring and system specification – Records, automation, optimum pattern of irrigations
3. Growing media – drainage/air, cation exchange, pH
  - Detail about ions and on pH
4. Feed recipes (1) – elements and ratios
  - Sampling
  - How coir samples are tested (video or laboratory visit)
5. pH practical – group participation
  - When on-site this can be done in the classroom
  - For on-line courses, FAST will send titration packs to participants for use on the day
6. Feed recipes (2)
  - Session on recipe development, interacting with a workbook developed and routinely used by the FAST team

**Both courses use several short video clips and 'scenario' type discussions.**

The Fruit School sessions held to date have shown us that on-line can work very well, with good discussion and easy interaction with slides, Excel workbooks etc.