



Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

Centre for Smart Agriculture

Production Technology of cut and loose flower



Module 2: Cultural practices followed in cut and loose flowers

Session 14: Fertigation methods



Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

Fertigation is the injection of fertilizers, used for soil amendment, water amendments and other water-soluble products into an irrigation system.

- Fertigation is related to chemigation, the injection of chemicals into an irrigation system. The two terms are sometimes used interchangeably however chemigation is generally a more controlled and regulated process due to the nature of the chemicals used.
- Chemigation often involves insecticide, herbicides, and fungicides, some of which pose health threat to humans, animals, and the environment.



Centurion
UNIVERSITY
*Shaping Lives...
Empowering Communities...*

Method of fertigation:

There are number of techniques which can be used to add fertilisers into the irrigation system.

These may be drip irrigation, micro-sprinklers, micro-jets or sprinkle irrigation.



Centurion
UNIVERSITY

*Shaping Lives...
Empowering Communities...*

The equipments used for fertiliser application are described as follows:

- a) Ventury: The system of injection is of very low cost, grid works by creation of a practical vacuum in the system and suction of fertilisers into the irrigation stream.





Centurion
UNIVERSITY
*Shaping Lives...
Empowering Communities...*

- a) Fertiliser tank: In this system a part of irrigation water is diverted from the main line to flow through a tank containing fertiliser in fluid or soluble solid forms before returning into the main line.

- b) Fertiliser injection: These are piston or diaphragm pumps which are driven by the water pressure of the irrigation system, and as such injection rate is proportional to the flow of water in the system.



Centurion
UNIVERSITY

*Shaping Lives...
Empowering Communities...*

Precautions during fertigation:

- Fertiliser tank must be used to inject water soluble fertiliser solution.
- Fertigation should be done in the last half an hour of total irrigation period and then continue drip for another about 5-6 hours after completion of fertigation.
- Concentration of solution should never exceed more than 10 percent.



Centurion
UNIVERSITY
Shaping Lives...
Empowering Communities...

Thank you.....