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Characteristics :
2.8 ha (2 greenhouses)
Cherry tomatoes and older tomato varieties + mini-pepper
Supporting system: gutter/ coir substrate
Cropping season : December-> November
Currently installing a co-generation system

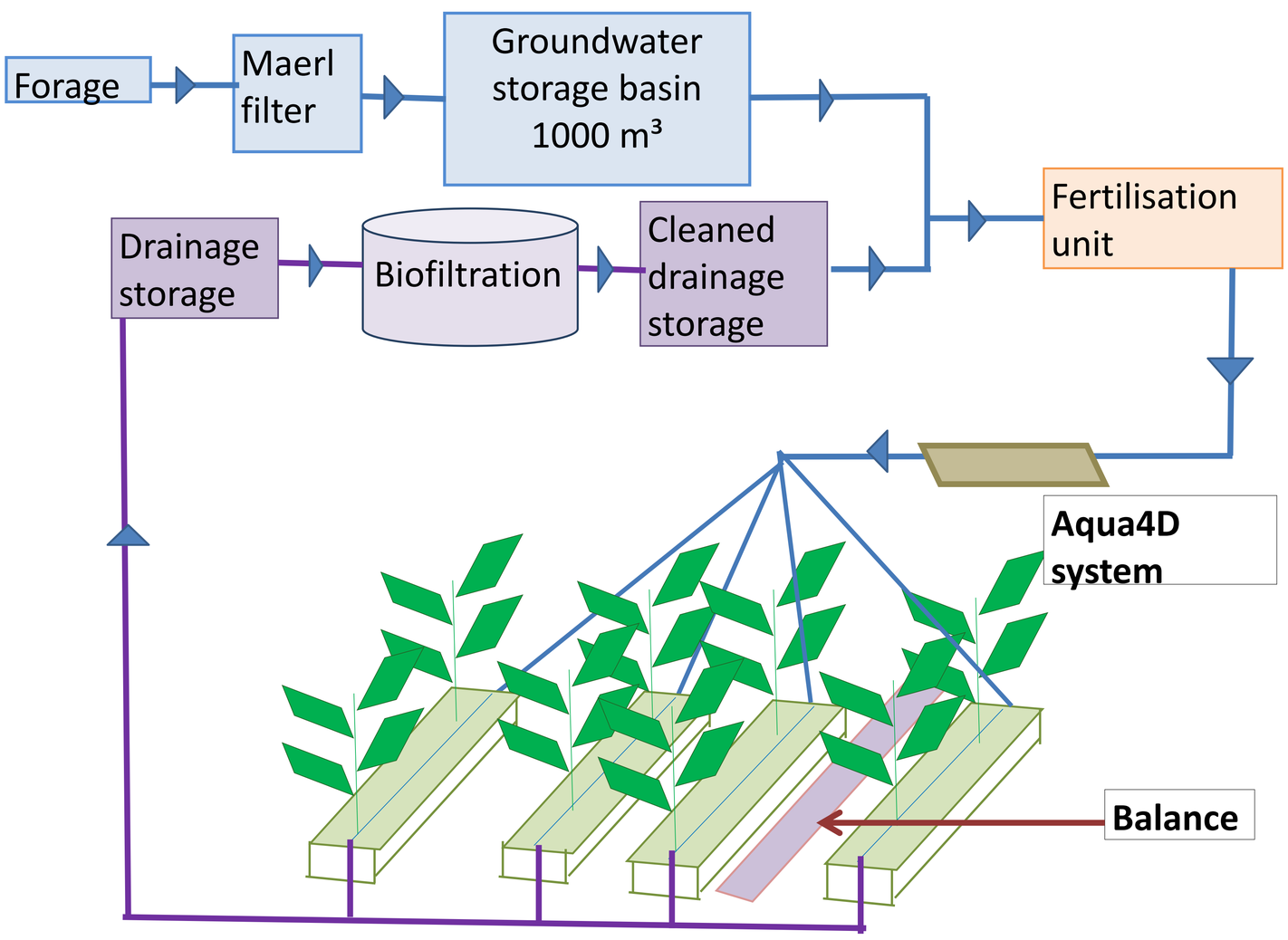
Another farm in organic agriculture: on soil under multispan greenhouse and glass greenhouse
Tomato, fennel, cucumber, Swiss chard, green bean
Most of the fertilisation is supplied with organic fertilisers,
Organic fertilisers supplied by fertigation are used as a complement
In this farm, irrigation is based on the grower's experience

Water resource management:
- Only use groundwater
- Storage 300 m³
- 2 fertilisation units (1/greenhouse)
- maerl filter (pH balance)
- Aqua4 D system for supply water after fertilisation unit.

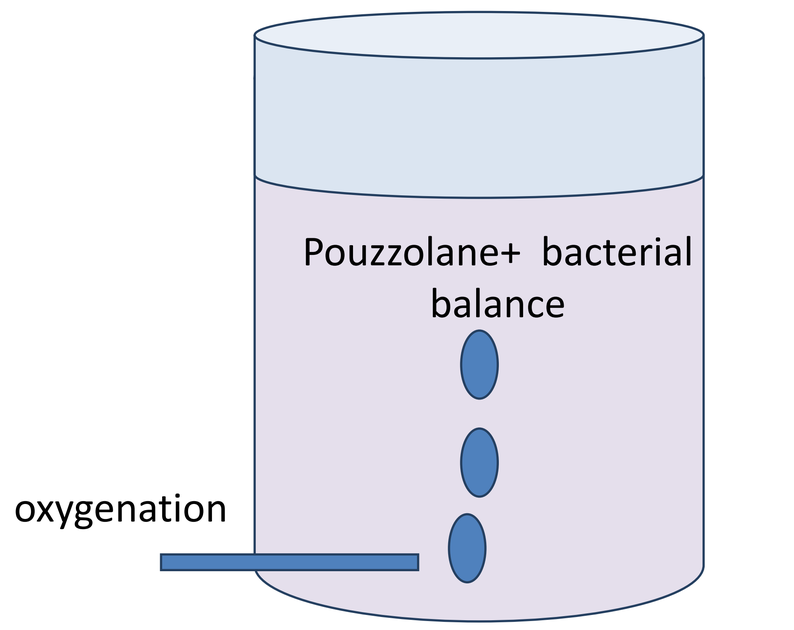
Water and fertilisation use efficiency:
- Irrigation control : managed by climatic computer (clock, solar radiation)
- Control tools: slab balances (1/ greenhouse)

Effluent management:
- 90 % of the drainage is recycled (yearly average of drainage represents ≈25% of the supplied water)
-storage : 135m³ before and 76m³ after treatment
- Water supplied to the crop≈ 10000m³/ha/year
- Drainage treatment by dynamic slow sand filtration (biofiltration): flow= 7 m³/h

System :



Biofiltration



Identification	Proportion in %
Bacillus sp. n°1	8
Pseudomonas putida	45
Bacillus sp. n°2	8
Pseudomonas sp.	27
Pseudomonas fluorescens	12

The grower's description:
Slow sand filtration enables a balance of various bacterial species in the water which makes the system more resilient and less subject to the excessive growth of one pathogen species in case of problems (contrary to other treatment systems which remove the pathogens).
This system requires some maintenance and monitoring once it is installed (less than with UV). Coir substrates are used because they are cheaper than rockwool, can be valued locally after the crop, and are compatible with the treatment system. The maerl filter has been installed to avoid large pH variations during the cropping season. The Aqua4D system has been installed to fight again agrobacterium problems; however, climate management may also have contributed improved control of this problem during the current year.
In the organic farm, irrigation management is based on the growers' experience. Sensors and other tools for irrigation management have not convinced the grower because of issues of reliability, not being user friendly , soil heterogeneity).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689687.