Aeroponics: a novel technology for seed potato production

Aeroponics is a soilless technique for growing plants. The plants are raised in a screen house lined with insect proof quarantine mesh, which prevents entry of insect pests reducing the risk of virus infection. The roots are suspended in a dark chamber and misted frequently with nutrient solution. The stems are supported to hold the weight of the foliage and tubers. Tubers are sequentially harvested as they attain the desired size or weight.

A seed emergence of 99% was achieved. The majority of the aeroponic tubers of Sebago variety produced 2–3 stems (stem thickness 11 mm) and yielded tubers in the medium seed size grade (30–60 mm). Total yield, was 22 t/ha.

Field planting of aeroponically grown seed, Sebago variety.

This material may be further bulked to provide high quality seed for growers. To improve yields, future trials will examine the use of closer plant spacing.

Potato yield (per plant) from aeroponically grown seed, Sebago variety.

Further information
Contact our Customer Service Centre on 13 25 23 or visit the Department of Agriculture and Fisheries website: www.daf.qld.gov.au.

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