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EFFECT OF DIFFERENT TYPES OF PROPAGULES ON POTATO PRODUCTION

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Production of Potato (Solanum tuberosum) from seedling tubers derived from true potato seed (TPS) is a viable method of overcoming most problems associated with direct field planting of potato seedlings.

Experiments were conducted at Regional Agricultural Research Centre, Bandarawela for two seasons (85 and 86 Yala) to evaluate the different types of propagules on potato production. Seedlings, seedling tubers (F_1) and once multiplied seedling tubers (F_1C_1) derived from open pollinated TPS of variety Desiree and Clonal seed tubers of the same variety were tested in these experiments.

The results revealed that seedling tubers of F_1 and F_1C_1 generation derived from open pollinated TPS gave similar tuber yields as the Clonal tubers, while the direct planting of seedlings gave significantly lower yields than seedling tubers. The yield ranged from 10 - 15 t/ha per for seedling tuber generations while the direct planted seedlings yielded 2 t/ha, compared to 11-16 t/ha with Clonal tuber seed.