

## **Evaluating the effects of non-soil media on emergence and growth of potato (*Solanum tuberosum* L.).**

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### **Abstract**

Two potato varieties, Bp1 and Amethyst, were grown over four weeks in various growing media. The growing media used were soil (control), saw dust, pine bark and coco peat. Parameters measured include pH, electrical conductivity (EC), cation exchange capacity (CEC), days to germination, number of stems, and plant height. Significant differences ( $P=0.015$ ) in days to emergence were observed in both varieties grown in the different media. Shortest time to emergence in both varieties was observed in potatoes grown in soil while longest days to emergence were recorded in saw dust. There were significant differences ( $P=0.033$ ) in number of stems of potato varieties grown in different media. In both potato varieties coco peat had the highest number of stems while soil and saw dust had the lowest number of stems in both varieties. There were significant differences in plant height ( $P=0.003$ ) of potato varieties grown in various media. Soil had the shortest plant heights in both varieties. Amethyst had the tallest plants when grown in coco peat (27.00 cm) while Bp1 had the tallest plants when grown in pine bark (29.33 cm). In conclusion Amethyst variety performed best in the coco peat growing medium while Bp1 variety performed best in pine bark growing media.