

## **The preliminary study on effect of music on the shoot development of chilli plant: *Capsicum annuum* L.**

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Music promotes or restricts the growth of plants (depending on the type of music). Present study was conducted to investigate the effect of music on the germination and growth of chilli plants (*Capsicum annuum* L). To avoid errors, homogeneous seeds from the variety Galkiriyagama were obtained from Gannoruwa seed certification and plant protection center, Kandy, Sri Lanka and the experiments were carried out under the green house conditions at the Department of Botany, University of Ruhuna, Sri Lanka. Two hundred eighty-eight seeds of *C. annuum* were selected randomly and were divided into 3 groups according to the 3 categories of music (classical-CL, rock-R, natural environment-I). Completely Randomized Design (CRD) was used with two replicates in such a way assign 48 seeds per replicate for each category. They were planted in six similar sized seed trays with equal amounts of soil which contained uniform mixture of compost and surface soil. “Group CL” was exposed to classical music; “group R” to rock music while “group I” was kept in silence treating as the control group. Music was supplied separately, every day from 7 am to 10 am and from 1 pm to 4 pm for 30 days continuously at a 10cm distance away from the seed tray with an intensity of 82 dB, maintaining equal environmental conditions. The number of germinated seeds, height of shoot and number of leaves were recorded. The measurement on shoot height was recorded once in 3 days. One-way ANOVA statistical test was used to observe whether there was a significant effect of the type of music on the height of the plant shoot. This statistical analysis showed that the mean height of the plant shoot was significantly different among the three groups ( $p < 0.05$ ). It was found that the chilli plants exposed to classical music showed the highest length of shoots and those exposed to rock music showed the least. Therefore, this study implies that classical music is the most appropriate type of music that improves the growth performance of *C. annuum*.

**Keywords:** *Variety, significant difference, germination*

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