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**EFFECT OF DIFFERENT PRE-SOWING TREATMENTS ON SEED GERMINATION IN *Schleichera oleosa* (Lour.) Oken. - CEYLON OAK TREE**

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**Abstract**

*Schleichera oleosa* (Lour.) Oken (Ceylon Oak) is an important medicinal tree species naturally grown in Sri Lanka, India, Pakistan, Bangladesh and Thailand. Natural regeneration by seeds is poor due to seed dormancy. To overcome poor germination problem in *Schleichera oleosa*, an experiment was conducted to find out the effects of pre-sowing treatments on germination. Seeds were subjected to seven pre-sowing treatments i.e T<sub>0</sub>-seeds from fresh fruit after drying (Control), T1- mechanical scarification (removal of seed coat), T2-seeds soaking in normal water for 12 hours, T3-seeds soaking in normal water for 24 hours, T4-seeds soaking in normal water for 48 hours, T5-seeds soaking in 1% KNO<sub>3</sub> and T6- seeds soaking in 3% KNO<sub>3</sub>. Each treatment had 21 seeds of equal size, weight and length. The media of the treatment was mixture of topsoil collected from forest floor, and cow dung in the ratio of 3:1. Highest germination percentage (80.95%) and germination index (2.68), were found in T1 treatment. Second best germination percentage (76.19%) and germination index (1.29) were found in T5 treatment. Seeds treated with normal water for 48 hours treatment revealed the next effective treatment. Results showed that the effect of different treatments on germination percentage of *Schleichera oleosa* was significantly different ( $p < 0.05$ ).

**Keywords:** *pre-sowing treatment, germination percentage, germination index*