

**Effect of seed treatments and seed bed media on germination of *Piper betel* L.(Belel) seeds**

Betel (*Piper betel* L) is a popular cash crop among the rural farmers in Sri Lanka, especially in Gampaha and Kurunagala districts. Leaves are the product of the crop and it is mainly used for chewing. It acts as a masticatory, oral deodorant and gentle stimulant. It is chewed after meals to sweeten the breath and is partaken at all ceremonial gatherings of an auspicious nature.

At present this crop has a considerable export. Although betel vine was under cultivation in Sri Lanka for many decades, not much research work has been done on its improvement. Recent identification of monoecious type of Betel and identification of the occurrence of Betel seeds has been cleared the pathway for the future development activities on Betel. Predominantly Betel vine is propagated through vegetative means,

but a propagation programme by seeds play a vital roll in any varietal improvement programme.

An experiment was conducted to identify an effective seed germination technique to germinate Betel seeds. Germination of Betel seeds in nature all habitats is very low and is important to have a seed germination method in other to improve the efficiency of crop development programme.

Fully ripened and softned Betel Splkes were harvested from monoecious Betel vines and seed extraction was performed immediately. Extracted seed were thoroughly washed with an ample amount of water, rinsed and air-dried for one day. Dried seeds were treated with acids in different concentrations (10%, 15%, and 25%) Sulfuric and nitric were the acids used in this purpose and the treated seeds were thoroughly washed with ample amount of water and placed in three different seed bed media (sand, coir dust and charcoal dust) and allowed for germination Three replicates were maintained and counting of germinated seed was performed 15 day after planting for each test.

Seed treatments were very effective in improving germination levels of Betel seeds higher acid strengths have shown higher germination performance. 25% Sulphuric acid treatment followed by coir dust seedbed media is the most suitable seed treatment method for germinating Betel seeds.