INFORMATION BULLETIN

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(*FOCUS ON NONI*)

Noni Propagation

Noni is propagated from seed or stem cuttings. Seed germination is, however, very slow and in natural conditions takes about 6 to 8 months. Stem cuttings establish in the soil comparatively faster although their root system is weak.

Mother plants should be well-grown, healthy trees that are visibly free from diseases. Fruit size, fruit taste, juiciness etc are the traits that need to be considered while selecting mother plant for seed collection.

Seeds from soft, ripened fruits must be collected by squeezing fruits in water or rubbing against a screen to remove fibrous fruit flesh. Noni seeds are reddish-brown, somewhat triangular, and have a conspicuous air chamber. Air sac helps the seeds float in water and aid in its dispersal. The seed coat is very hard and takes several months to decompose in natural conditions to enable contact with water and initiate germination process. In the nursery, such natural dormancy period is shortened by clipping or puncturing the seed, a process called scarification. Scarification significantly reduces germination time, improves germination percentage and promotes uniform sprouting.

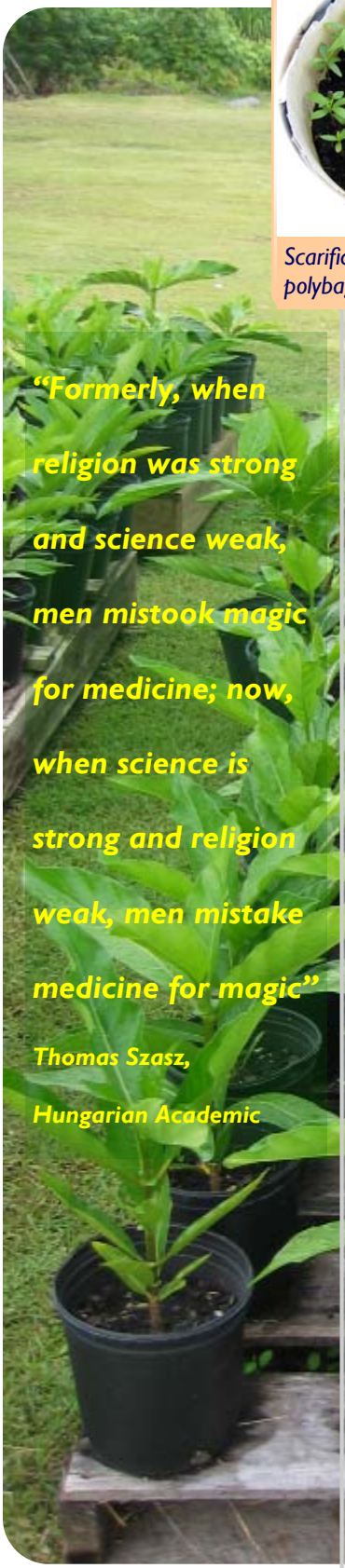
Fresh noni seeds can be planted immediately after removal from the fruit. Noni seeds require hot, wet conditions for optimum germination. Humid island climate is, therefore, best suited for germination process. Seeds may be germinated in seedling flats or trays with commercially available potting mix media or a mixture of compost or coir pith. It is however, advisable to heat treat or solarize compost, for it may contain root-knot nematodes and noni is highly susceptible to root-knot nematodes. Scarified seeds generally germinate within a month and ready for transplanting in two or three months. Deeper seedling flats are preferred to shallow flats, because seedlings with longer tap roots are produced. Seedlings with deep, well established taproots tend to withstand the shock of transplanting better and become established more quickly. When seeds are germinated in flats, they should be transplanted into growing containers within few weeks. The plant size and vigor achieved depend to a large extent on the size of pot used—the larger and deeper the pot, the larger and more vigorous the noni seedling. Noni plants can become pot-bound and may stop growing if the pot is too small or shallow. Generally such pot-bound plants recover quickly once transplanted into suitable field conditions.

Noni seed | *Clipped seed with embryo inside (arrow)* | *Germinating seed*

Noni: Plant with a brain

Noni is a classic example of adaptogenic herb (the term adaptogenisis used by herbalists to refer to a natural herb product that is proposed to increase the body's resistance to stress, trauma, anxiety and fatigue. All adaptogens contain antioxidants). Noni contains naturally occurring vitamins, minerals, trace elements and co-factors. Moreover, every portion of the noni plant contains rich array of natural chemicals with desirable effects on the body. There is no pharmaceutical agent that can offer the same benefits. In addition, the beauty of plant medicines is that they are intuitive about what your body needs. In other words, they adapt to whatever your individual health needs are. Although noni is not the only medicinal plant with multiple uses, its potential health benefits are unique and valuable. Anyone interested in achieving long-term health should consider supplementing with noni. ***Stay healthy!***

Scarification gives rapid and uniform seed germination (left); three months old noni seedlings grown in polybags, ready for transplant into the field (right)



"Formerly, when religion was strong and science weak, men mistook magic for medicine; now, when science is strong and religion weak, men mistake medicine for magic"

Thomas Szasz, Hungarian Academic

Although this method gives the most rapid and uniform germination of seeds, scarification process is labor-intensive. Additionally, stored seeds may lose viability over time, and should be planted with six months of harvest.

Noni plants can also propagated by stem cuttings. Cuttings of about 8 to 10 inches long from vertical branches of well-grown mother plants should be used. Insert the cut end to growing media and maintain humid conditions for proper germination. Generally rooting occurs within few weeks.

Vegetative propagation is a rapid way to produce a large population of plants that are same as mother plant. However, plants from cuttings have no tap root and are naturally weaker than seedlings.

Noni plants established from stem cuttings (as above) are generally weak without tap root system

Ever since its introduction by early colonizers, noni has become naturalized on many Pacific islands. Today, it thrives in a wide range of soils and environments, including lava soil, forests, tide pools, gulches and cliffs, coastline and beaches, coral atolls, limestone beds and arid climates. It grows well in wet to moderately wet conditions from sea level up to 800 m elevation.

Noni growing on a dried lava bed in Hawaii

As part of the noni project, we freely distribute elite noni seedlings to community. Please stop by the Experimental Station to pick up seedlings and for any information on planting and cultivation practices.

Disclaimer: *The information provided in this information sheet is meant for educational purpose only. For any medical conditions, always consult a qualified medical practitioner.*

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