

## Raising Seedlings of Patipata (*Schumannianthus dichotoma*)

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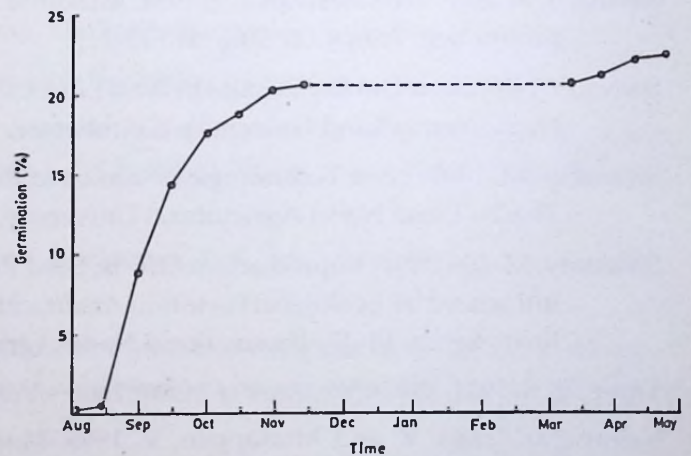
**Key words :** Fruits, *Schumannianthus dichotoma*, seedling raising

*Schumannianthus dichotoma* (Family-Marantaceae), locally known as patipata, is cultivated in water logged and swampy lands over the greater part of Bangladesh. Plantations of *S. dichotoma* are established using rhizomes (Mohiuddin and Rashid 1988, Rashid *et al.* 1993). Attempts have been made at Bangladesh Forest Research Institute (BFRI), Chittagong to raise seedlings of this species from fruits which are available free of cost as they have no utility. This paper describes the method of nursery development from collection of fruits to raising of seedlings in polybags.

Flowering of *S. dichotoma* occurs in March-April. Fruits ripen during June-July. Change in colour from light green to light yellow indicates the maturity of fruits. A fruit is usually 1-3 seeded. The fruits are wrinkle and indehiscent. Diameter of the fruits varies from 14 to 16 mm. One kg. contains approximately 1700 fruits.

Whole fruits were sown immediately after collection in the nursery bed directly under the sun. The beds needed to be protected from insects, and insecticide was used for this purpose. Regular watering was made. Data on germination were recorded at every seven days interval. Germination started after 3 weeks. It continued for a period

of 9 months (Fig. 1). No germination was noticed between mid-November and March. After winter, further germination took place following rains. In all, 3335 fruits were sown of which 754 fruits germinated. Thus a germination percentage of 22.61 was obtained.



**Figure 1.** Cumulative germination of fruits/seeds of *Schumannianthus dichotoma* over time.

Pricking of seedlings from the nursery bed and their transfer to the polybags, containing soil and cow dung at 3:1 ratio, were undertaken one



week after germination. Virtually no mortality of seedlings was recorded during this process. The polybags were kept in shade for two weeks. Afterwards, they were placed under direct sun. Watering and weeding were made when necessary. In three months time, the seedlings attained a height of about 15-20 cm with 4-6 leaves (Fig. 2). By planting these seedlings in the field, 100 percent survival was achieved. No seedling was left in the bed. To develop seedlings at a cheaper method, it is also necessary to observe the possibility of raising seedlings in the beds and directly out planting in the field with success.

For obtaining germination, matured fruits must be carefully collected. Use of immatured seeds often leads to germination failure. Detailed studies may be conducted to obtain higher germination and standardization of nursery technique.

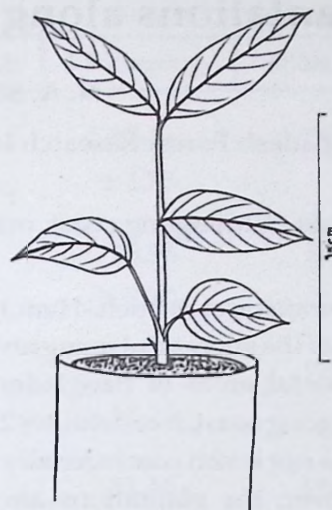


Figure 2. Three months old seedling of *Schumannianthus dichotoma* in polybags.

## References

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