

# PROPAGATION OF BREYNIA DISTICHA 'ROSEO-PICTA' BY HARDWOOD CUTTINGS

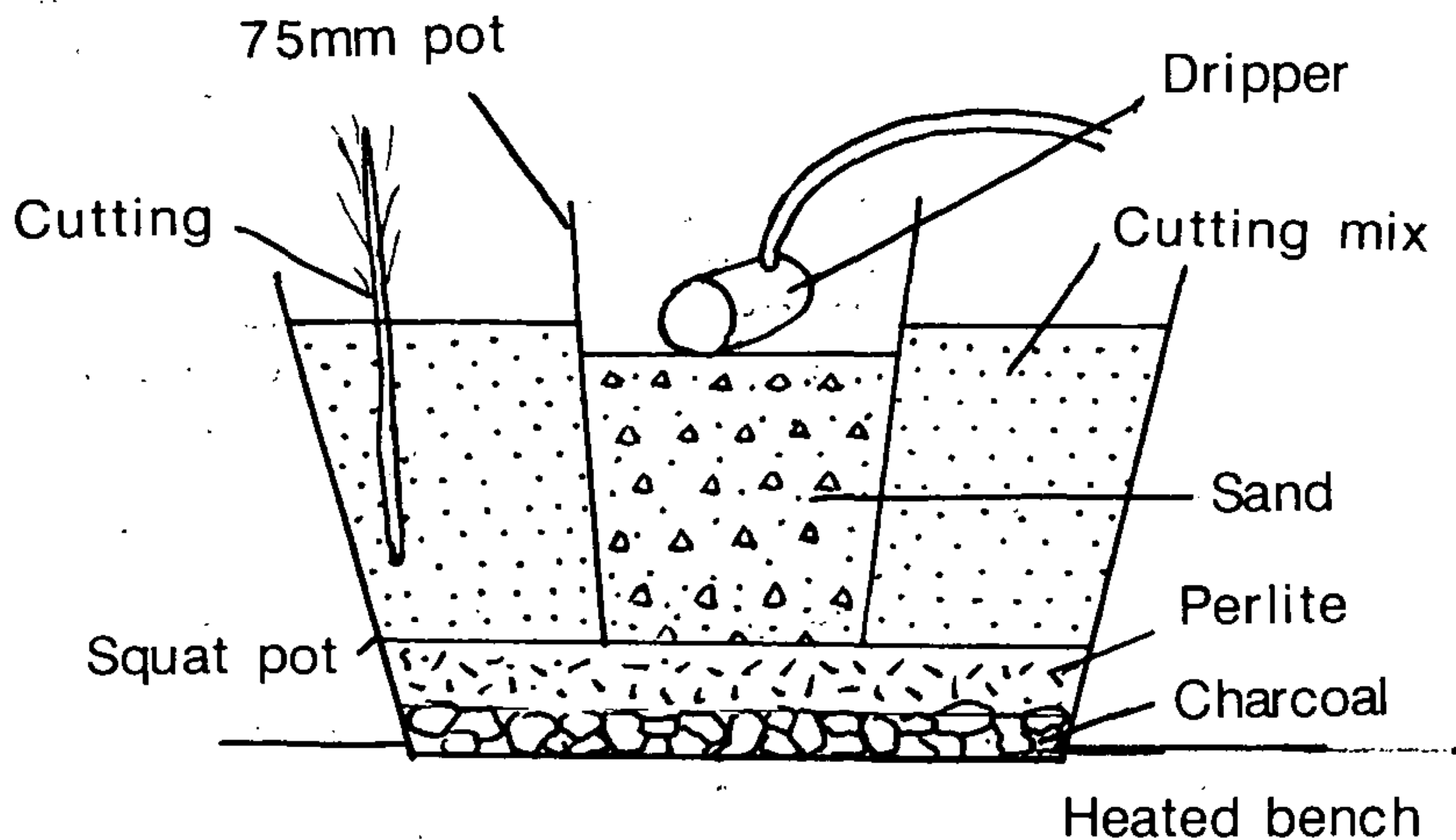
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*Breynia disticha* 'Roseo-picta' [syn. *B. nivosa* 'Roseo-picta'] (Euphorbiaceae) is a delightful ornamental plant of uncommon beauty. Exotica describes it as a most unusual plant having small oval papery leaves that are mottled or variegated, green white and pink, looking like flowers, with red stems and petioles.

This plant has proved difficult to propagate in the past, so we have developed the following method for its propagation.

Squat pots (175mm) are used for the propagation of the cuttings. A layer of charcoal about one centimeter in depth is placed in the bottom of the pots, and a 15mm layer of perlite is placed on top of this. A 75mm pot is placed in the centre of the larger pot on the perlite. The larger pot is then filled with a propagating medium of 2 parts sterilised coarse river sand, 2 parts perlite, and 1 part vermiculite. The small centre pot is then three quarters filled with sterile river sand (Figure 1).



**Figure 1.** Squat Pot with small centre pot and dripper set up.

All the sand is sterilised in a commercial Sharp microwave oven. An alternative method is to prepare the pots of medium and sterilise the mix and the pots together.

The microwave oven holds four units at a time. They are heated for 12 minutes to a maximum temperature of 100°C. This type of sterilising is economical, especially for a small operation.

The pots are set out on a heated bench and Moss<sup>®</sup> drippers (5 litres per hour) are placed, one per pot, in the small centre pot. It is easier to insert the drippers before the cuttings have been inserted in the pots.

The cuttings are taken in mid-summer (January)—this is very important. Three node cuttings are used. First they are washed with Clensel<sup>®</sup>, a detergent type garden insecticide. Active ingredients are: oil of citronella, 11g/l, ammonia, 4.5g/l, potassium citrate, 118g/l, at a rate of 40mls per litre, to remove eggs spores and other possible contaminants. The cuttings are then wounded and quick-dipped in a 10,000 ppm IBA solution.

The cuttings are then inserted 35 to 45mm into the sterile medium in the large pots, and watered with a Previcur<sup>®</sup> solution (1.5 mls per litre).

The heated bench is then covered with a plastic tent. NO MIST IS USED.

On the third day after the cuttings have been set, the drippers are turned on and set to operate for 2 minutes every second day. This is usually enough to keep the medium slightly moist and the humidity in the tent at a satisfactory level for this time of the year. However, we monitor the moisture content in the pots by placing, and leaving, a thin wooden stake in one of the pots. This is checked every day, and if the stake dries out more water is added. This is a necessary safeguard as the heated bench tends to dry things out from the bottom up.

After three weeks the cuttings are watered with an all-purpose liquid fertiliser (Trygon Field Pack<sup>®</sup> at 4mls per litre).

After four weeks the cuttings have usually rooted and are removed from the heated bench to the shade house. We continue to fertilise them weekly with the liquid fertiliser solution. At ten weeks they are potted-on into 150mm pots.

The dripper and humidity tent system has been successfully used by our nursery for *Bougainvillea*, *Hibiscus*, *Pyrostegia*, *Acalypha*, and other plants where constant misting tends to cause fungal problems.