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RESEARCH NOTES:

INDUCING OF ROOTING BY RINGING TWIGS IN MULBERRY (MORUS SP.)

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Vegetative propagation of plants from stem cuttings is the most convenient and economical method. Mulberry may be propagated either through seed or vegetatively. The vegetative propagation has several advantages like maintenance of particular characters of the plant, easy and speedy raising of saplings in large numbers, adoptability to a particular habitat, to develop resistance to pests and diseases. It is not possible to reproduce true to type from seed.

In Pakistan, the most common method of propagating several well acclimatized exotic mulberry varieties is through cuttings. This method is practised in spring when hardwood cuttings are either raised in nursery bed or planted directly in the field. Hard wood cutting method makes use of regenerating function of roots. Several methods are therefore developed to induce rooting. Guha Thakurta and Dutta (1941) successfully propagated mango plants from cuttings of ringed twigs. B. K. Gupta, J. P. Gaur and V.P. Sharma (1990) made successful attempts to induce rooting in mulberry by ringing twigs.

This study was undertaken to have an understanding about the rooting behaviour of mulberry by ringing twigs. Three mulberry varieties namely ; Local mulberry (Morus alba), Japanese hybrid variety and Chinese Guangdong jing variety (Morus atropurpurea) were considered for the experiment. About six months old branches (arising in February, 90) were ringed at the bottom by removing one centimeter bark with the help of a sharp knife during monsoon, 1990 (on August, 5). No other treatment was given. It was observed during the end of August,90 that rooting was initiated on the upper part of the ringed shoots (Fig.1) of the Japanese hybrid and Chinese Guangdong jing varieties, being more prominent in the former; where as the

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rooting in the local mulberry was not conspicuous.

The phenomenon indicates that ringing induces rooting in mulberry, although the extent of rooting varies with the varieties. The root initiation in ringed branches of Japanese variety was observed more which was followed by the Chinese variety. The rooting in local mulberry was either too minute or lacking altogether.

The rooted twigs were planted in the earthen pots which sprouted well (Fig.2)

REFERENCE

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Fig. 1

ROOTING OF RINGED TILE

Fig. 2