

ANOMALOUS VEGETATIVE  
REPRODUCTION BY CUTTINGS  
IN *FICUS RELIGIOSA*, LINN.

MANY plants reproduce themselves by vegetative methods, either naturally or artificially. Artificial methods are often resorted to by gardeners, foresters, etc., for the propagation of plants of flowering, ornamental and economic importance.

Of the genus *Ficus*, *Ficus bengalensis* Linn., *Ficus carica* Linn., *Ficus elastica* Roxb., *Ficus Tsiela* Roxb., etc., are propagated from stem or branch cuttings. So far as the author is aware, *Ficus religiosa* Linn.—a plant which is held in great veneration by the Hindus—is propagated from the seedlings only and not by means of cuttings.

Every year several cuttings of this plant are used as supports to various climbers grown for the class work in the College Botanical Garden. But this year it is found that out of twenty such cuttings only five are found to sprout into leaves and grow in order to produce fresh complete plants. These cuttings were cut down as usual at the end of the month of May and kept for use as supports to climbing plants later on in the monsoon. Remarkable thing about them, this year, is that one of the pieces while lying on the ground gave rise to adventitious roots from one of the cut ends. These roots appear to arise from the region of cambium between the central mass of wood and the peripheral region of the bark. In the beginning of the month of August when these pieces were taken in use, that one which had developed adventitious roots was used after cutting off 18-inch piece from it together with these roots.

The phenomenon of sprouting was noticed after 15 to 20 days in different pieces. This was thought at first to be of temporary nature due to the stimulus given to the buds to sprout, and thereafter to dry up and die. But this did not prove true as these cuttings have struck roots and are able to put forth more of vegetative shoots. The table below gives the circumference just above the ground, height and the number of new shoots on these five

cuttings. Mention should be made that these pieces were all branched and some of these branches have dried up while others are alive.

No.	Circumference	Height	No. of new shoots
1	11"	5'—6"	225
2	6.5"	8'—2"	100
3	8"	5'	90
4	7.5"	7'—1"	66
5	8.5"	8'	20

Regeneration is wide-spread among plants. An organ which has been lost is replaced either by formation of a new one in the vicinity of the wound or the outgrowth of one which was in a rudimentary condition. The capacity to form roots is also wide-spread. After roots have developed the stem gives rise to a complete plant either by the unfolding of axillary buds or by development of new growing points to shoots. For all these what is required is a suitable environment.

This year Junagadh had an abnormal weather during the monsoon. Daily several showers of rain continued for nearly two months. There was very little of sunshine during these days, owing to the sky being overcast with clouds. The atmosphere and the soil remained moist all throughout.

This phenomenon may be attributed to this abnormal weather during the monsoon of this year, but what about the development of adventitious roots on one of these cuttings in the dry hot days of the months of May and June? Hence these can only be taken as some abnormal cases.

In this plant, abnormalities have been recorded by Mallik<sup>1</sup> and Singh.<sup>2</sup>

Bahauddin College,  
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1. Mallik, P. K., "Development of roots from the petiole of *Ficus religiosa* leaf," *Curr. Sci.*, 1934, **3**, 105. 2. Singh, T. C. N., "Notes on the Teratology of certain Indian Plants," *Jour. Ind. Bot. Soc.*, 1931, **10**, 135.

CENTENARY OF SIR PATRICK MANSON

THE Centenary of Sir Patrick Manson, "the father of tropical medicine" (1844-1922) was marked by a special meeting on Thursday (December 14) at Manson House, Portland Place, of the Royal Society of Tropical Medicine and Hygiene.

Sir Philip Manson-Bahr (his son-in-law) gave an illustrated address on the "Manson saga" and recounted the remarkable career of the young Aberdeen graduate who emigrated to Formosa in 1865 and in 1894 formulated the merozoite-malaria theory, establishing five years later the London School of Tropical Medicine with the aid of Joseph Chamberlain.

This school has suffered much as a result of the war. Most of its activities have been suspended and the Hospital for Tropical Diseases

has been destroyed and disbanded. The importance of tropical medicine is now greater than ever and an early rebuilding of the hospital in London becomes more necessary for the benefit of sufferers from tropical disease as a result of the war in the Far East.

It is hoped to found a research scholarship in tropical medicine as an additional memorial. Sir Philip Manson-Bahr appealed for the preservation and extension of Manson's work and Dr. G. Carmichael Low spoke of his dying wish for the establishment of a research scholarship. Other colleagues and friends added their personal testimonies. Manson's diary of original drawings and preparations were exhibited.