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Reducing the gestation period of *Hevea brasiliensis* through improved planting material and Agro-management practices

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Hevea brasiliensis is a prominent plantation crop of considerable significance to Indian economy, having a share of 8.1 per cent of world's natural rubber production and 8.7 per cent of consumption. This paper is focused on the results of a field experiment initiated by the Rubber Research Institute of India to evolve an agronomic package to reduce the immaturity period of rubber in which the treatments included combinations of two types of planting material viz; green-budded stumps raised in polybags and plants raised by direct seeding in polybags and two management options viz., current recommended package of practices, and an integrated management comprising enhanced nutrient application, selective manuring and conservation-oriented tillage. The results showed significant difference in the performance of two types of planting material. The direct-seeded green-budded plants were significantly superior to green-budded stumps throughout the period under study. The effect of agromanagement practices was reflected in growth of rubber. The girth of the plants under integrated management was superior to that of respective type of planting material under current recommended practice. The soil nutrient status viz., the organic carbon and av. K contents was significantly higher under integrated management. However, the leaf nutrient status did not vary significantly among treatments. Thus the treatment with direct-seeded green-budded plants under integrated management was significantly superior to all others and 67% of the plants reached tappable girth in five years and nine months as against 17% in the control (budded-stumps raised in polybags under the current recommended practices). The study indicated the potential for reducing the gestation period of rubber plantations through the adoption of improved agro-management practices.

Biography

Sherin George obtained her PhD degree in Agronomy from Tamil Nadu Agricultural University, Coimbatore (Gold medalist). Presently she is working as a Senior Scientist in the Department of Agronomy at Rubber Research Institute of India, Kottayam, Kerala. She is the recipient of Dr. C. S. Venkata Ram Memorial Award for the best original research paper published in the Journal of Plantation Crops for the biennium 2009-10 and she received the Best Poster Award in the 24th Kerala Science Congress, 2012. She has around 30 research papers in reputed journals. Her current research interest lies in reducing the immaturity period of *Hevea*.

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