

INTERNATIONAL CLONE EXCHANGE AND GENETIC ENHANCEMENT RESEARCH IN *HEVEA BRASILIENSIS*

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Small holding size, high cost of production and reduced availability of suitable lands for further expansion of natural rubber (NR) cultivation make increasing NR productivity per unit land area more important in ensuring both its sustainable supply and profitability to growers. Developing clones with enhanced genetic potential for high yield is central to any effort to increase NR productivity. International clone exchange in the past has led to development of high yielding hybrid clones which increased productivity in every country. Parents of majority of commercially cultivated clones in every NR growing country are exotic clones imported from another country. In some cases, the introduced exotic clones were successfully used for large scale commercial cultivation in the new country. Every country that has exchanged its clones with another country in the past has benefited from it. To sustain NR production, it is imperative that breeding for genetic enhancement for high yield, tolerance to pests and diseases, climate stress *etc.* continues without break. For this, geneticists and breeders should have access to the right genomic resources and adopt latest know-how and techniques in plant genetics and breeding. International clone exchange will widen the *Hevea* genomic base available in a country for breeding superior clones.

Keywords: Breeding, Clone exchange, Genetic enhancement, Genomic resources, Heterosis, Productivity

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