

Underutilized fruit trees in agroforestry systems in Central and North Sumatra: Opportunities and challenges

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Background

Indonesia is widely known for its tropical fruit diversity. The 329 fruit tree species (native and introduced) described from Indonesia (Rifai, 1986), belong to 61 plant families and 148 genera. Uji (2007) reported 226 fruit species native from Indonesia, which most of them (203 species) are tree species. Only 62 tree species have been 'domesticated' (with recognized sources of germplasm), including 18 endemic species and 4 rare species. Four genera were categorized as having high economic value and were listed as priority fruit tree species: *Mangifera*, *Garcinia*, *Nephelium* and *Durio* (Winarno, 2000). Durian is one of the most popular fruits amongst all. It is a nutritious fruit which contains carbohydrate, minerals, vitamins, but no cholesterol.

Durian is categorized as an underutilized fruit (Narendra et al., 2012), as its potential contribution to market or household economies is not fully exploited (Aboagya et al., 2007). The fruit production of Sumatra island mostly comes from smallholder farmers, who planted or managed fruits trees in agroforestry systems.

Objective of the study was to assess the limiting factor of productivity of underutilized fruits, durian in particular and look for the challenges to improve sustainable fruit production.

Survey Location

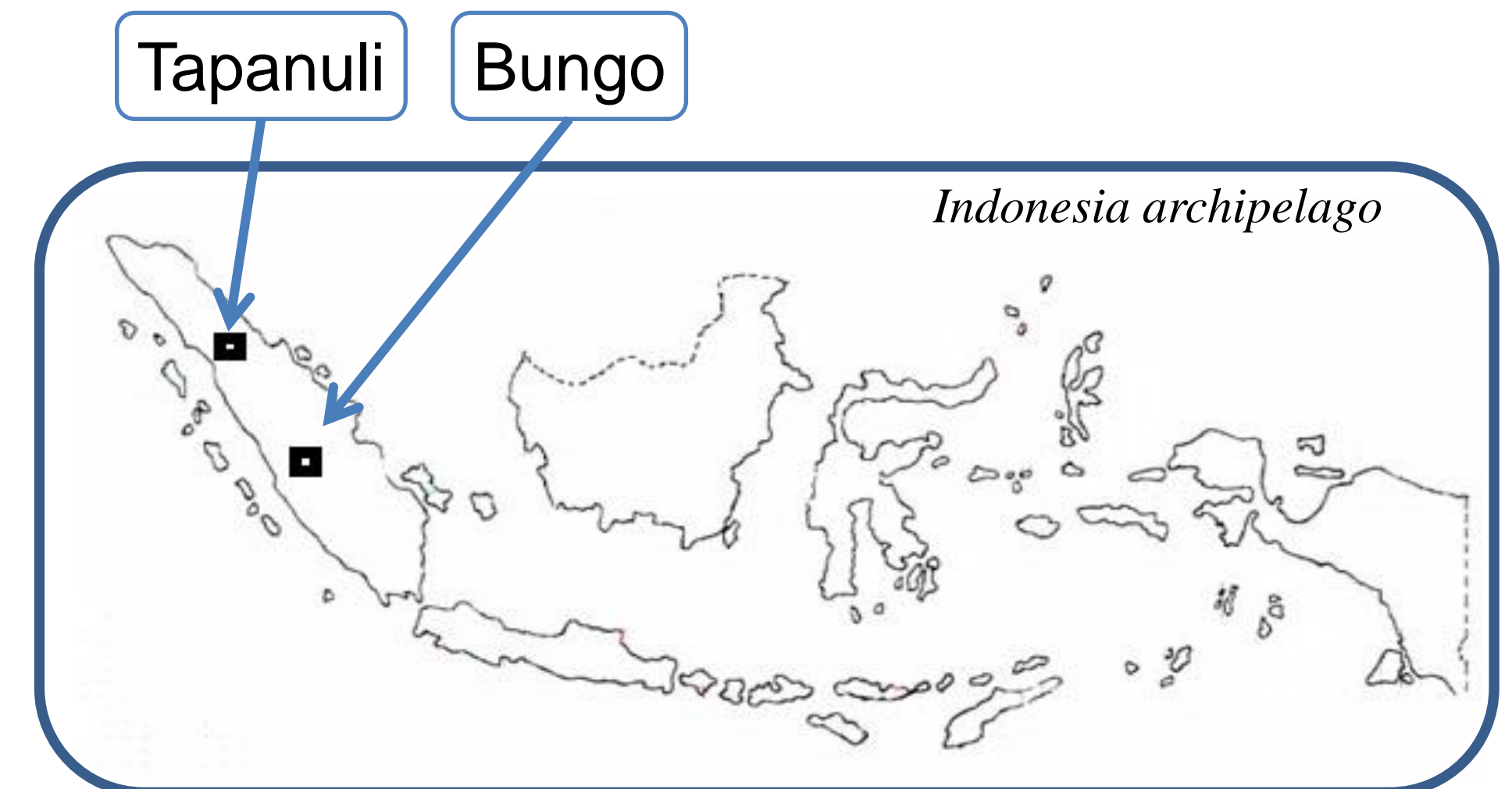
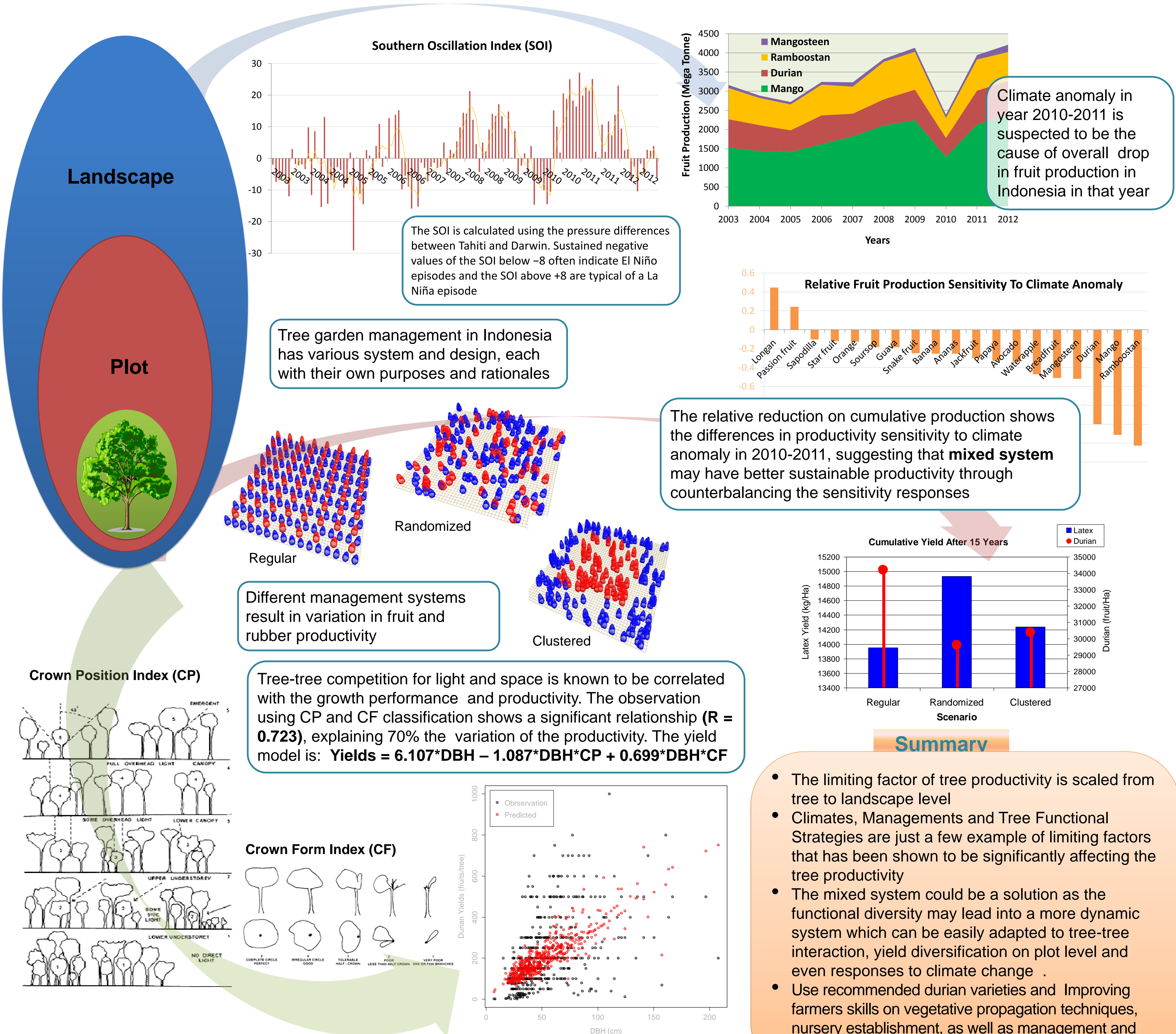


Figure 1 (Clockwise). Durian agroforestry systems in Tapanuli, North Sumatra. Durian fruits. Flesh of durian (*Durio zibethinus*). Red durian (*Durio graveolens*).



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