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The Distribution, Productivity and Conservation of Camphor Tree, Dryobalanops Aromatica in West Coast of Sumatra, Indonesia

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Abstract: Harvesting camphor resin has been carried out since the beginning of civilization on the west coast of Sumatra. Oil or crystals that containing borneol are harvested from the camphor tree (Dryobalanops aromatica). Non-timber forest products are utilized for the manufacture of fragrances, antiseptics, anti-inflammatory, analgesic as well as effective for the treatment of blocked arteries. Based on exploration on the west coast of Sumatra, these endemic tree species were found remaining growing in groups on small spots in the lowlands to the hills. Some populations are found at an altitude of 700 meters above sea level in Kadabuhan, Jongkong and Sultan Daulat in Subulussalam district, Singkohor and Lake Paris in Aceh Singkil district, and Sirandorung and Manduamas in the north of Barus, Central Tapanuli district. These multi-purpose tree species was also identified as being able to adapt to the Singkil Peat Swamp. The decline in tree population has a direct impact on reducing their productivity. Conventionally, the crystals are harvested by cutting and splitting the stem into wooden blocks. In this way about 1.5-2.5 kg of crystals are obtained with various qualities. Camphor retrieval can also be done by making a notch on a standing tree trunk and collecting liquid resin (ombil) that is removed from the injured resin channel. Twigs and leaves also contain borneol. The aromatic content in this section opens opportunities for the supply of borneol through the distillation process. Vegetative propagation technology is needed to overcome the limitations of available seeds. This breeding strategy for vulnerable species starts with gathering genetic material from various provenances which are then used to support the provision of basic populations, breeding populations, multiplication populations and production populations for extensive development of camphor tree plantations

Keywords: camphor, conservation, natural borneol, productivity, vulnerable species

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