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## “Resource Management: Private-Public Partnership and Knowledge Sharing”

### JAMBI AS A CENTER OF GENETIC RESEOURCES OF A THREATENED TREE SPECIES `IRON WOOD` (*Eusideroxylon zwageri* T. et B.)

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#### 1. Jambi Province

Jambi province is located geographically between 0° 45' to 2° 25' latitude South and 101° 10' to 104°55' longitude East. The total surface of Jambi province is about 45.000 km<sup>2</sup>. The total forest area of Jambi province was about 2.604.443.94 ha in 1996/1997 (Anonymous, 1997a). Ecosystem types is various separated from low land forest until mountain forest formation. The most important plant species that have been protected are iron wood (*Eusideroxylon zwageri* T. et B.), pacet wood (*Harpoulia* spp), pine strain kerinci (*Pinus merkusii*) and the giant flowers (*Amoropholus titanum* and *Rafflesia arnoldi*).

#### 2. Iron wood, conditions and varieties in Jambi

In Jambi, iron wood grows in Senami natural forest (15.500 ha). In Durian Luncuk I (30,3 ha) and Durian Luncuk II (44,5 ha) conservation forests. According to the decree of Indonesia Forestry Minister number 34/kpts-II/1987, those areas are purposely for iron wood conservation. In order to conserve the existing Iron wood in Jambi, Governor of Jambi Province issued the decree no. 522.12/760/PP, 25 January 1989 which regulated the forest product concession. In 1995, the Jambi Governor also issued a circular letter to straighten up Iron wood distribution and trading in Jambi. Oldfield *et al.* (1998) showed that iron wood is included in the list of threatened tree species.

The some varieties of iron wood in Jambi, Soeroto (1999, pers. comm.) in Irawan (1999), stated that, Senami natural forest has four varieties of iron wood: *bulian sirap*, *bulian daging*, *bulian tanduk* and *bulian kapur*. Each variety has different wood characteristics. Heyne (1987), also explained that there are four varieties of *E. zwageri* T. et. B. in West Kalimantan, *belian tando*, *belian lilin*, *belian tembaga*, *belian kapur*.

Some experiments on Iron wood that already conducted in Jambi in the recent year are: (1). Vegetation analysis of Senami iron wood forest stand - Jambi (Hastuti, Nezriyetti and Nursanti, 1999). (2). Research on cutting propagation of iron wood (Irawan 1999). (3). Research on generative propagation of Iron wood (Anita, 2000).

#### 3. Future Development

**3.1. The studies and researches on iron wood:** (1). There is a cooperation between Forestry Research Team - Jambi University and Natural Resources Conservation Unit-Jambi on iron wood experiments. (2). Research on eco-physiology and genetic variation of iron wood. (3). A study on the chemical substances of iron wood.

**3.2. Action Plans:** (1). Mapping of iron wood mother trees. The mother trees will be marked and mapped permanently and will be used as a source of seeds (2). Hedge and seed orchards building. (3). Iron wood breeding program (4). Maintaining and increasing genetic diversity of iron wood.

#### 4. Conclusions and recommendation

1. There are four potential varieties of iron wood in Jambi Province.
2. Some researches and actions will be necessary in order to conserve and develop iron wood.
3. It is important to build up a international cooperation to manage the natural resources in the tropical region.

**Keywords:** Jambi, iron wood, genetic resources and threatened species