

**Agarwood Production in *Gyrinops walla* (Walla patta): Myths and Reality**

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**Abstract**

*Gyrinops walla* is recorded only in the wet and intermediate zones of Sri Lanka and very rarely in southwest India. Recently *G. walla* became famous in Sri Lanka due to smuggling efforts to extract a valuable resinous product known as Agarwood which is produced as a self-defence mechanism of certain species of family Thymalaeaceae. Most of the species of *Aquilaria* and a few species of *Gyrinops*, *Aetoxylon* and *Gonystylus* of the above family are capable of producing agarwood.

The process of Agarwood oleo-resin production is the tree's response to injury of its first line of defence, formation of phloem callus tissue, is inhibited from forming over the injury. The Agarwood resin is highly sought after for religious, medical, ceremonial and domestic activities by Asian Buddhists and Moslems. A large demand is also seen in Southeast Asia, Middle East, United States and Europe for perfume manufacturing.

Several sesquiterpenes, chromone derivatives, sesquiterpene furanoids, tetradecanoic acid and pentadecanoic acid are contained in Agarwood resins and the sweet aroma of the wood comes from sesquiterpene compounds. The research conducted so far revealed a strong similarity of the above compounds between *G. walla* and that of the commercially Agarwood producing *Aquilaria* species.

According to the recent information, *G. walla* smuggling has been conducted in Sri Lanka for a long time. The highest single amount which was made ready to export was 13,489 kg recorded in May 2013. Although agarwood production quantities using *G. walla* in Sri Lanka has not been properly recorded in the past, according to the data obtained from Sri Lanka police and customs, over 17,500 kg have been harvested in the last 12 months.

However, most of the illegally felled trees had not produce Agarwood resins as the formation has to be artificially induced. Even the Agarwood has formed due to injuries, it would have been in minute scale because artificial resin induction was never practised in Sri Lanka. Unfortunately, the officials who valued the smuggled *G. walla* timber gave an unacceptably high value and therefore people disastrously felled the trees growing in the wild and homegardens expecting high incomes. Finally a massacre of trees was started and it did not provide expected incomes.

It should be known that *G. walla* trees do not produce Agarwood under natural conditions. Therefore until the current researches are completed to identify the best methods to form Agarwood in this species, unnecessary harvesting should be stopped. Awareness programmes with the Government assistance is highly useful in this task. Otherwise no trees will be left when the resin formation methods are identified.

**Key words:** Agarwood, *Gyrinops walla*, Walla patta