

Headline **Flaccid outlook for Tongkat Ali**  
 Date **25. Jan 2009** Language **ENGLISH**  
 Media Title **New Sunday Times** Page No **16**  
 Section **Local News** Article Size **690** cm2  
 Circulation **171518** Frequency **Weekly**  
 Readership **611000** Color **Full Color**  
 AdValue **9840.23**



# Flaccid outlook for Tongkat Ali

**The situation for 'man's best friend' looks bleak. By 2014 we would have used up all the cultivated Tongkat Ali in the country, bringing an end to the best-selling herb in Malaysia. Forest Research Institute Malaysia officials tell AUDREY VIJANDREN that the issue demands urgent attention**

**W**E may run out of petroleum and we may run out of gas but Malaysian men might suffer a bigger loss in five years, when the last Tongkat Ali plant is harvested.

The much loved and controversial root, with its male-enhancing properties, has been around for years.

It is the most used herb in the country but unplanned commercial harvesting and increasing demand may force us to stop leaning on "The Cane".

FRIM's (Forest Research Institute Malaysia) deputy director-general (research), Datuk Dr Abdul Rashid Ab Malik, says the sustainable supply of Tongkat Ali is a huge concern that needs immediate attention.

"The Tongkat Ali plant takes five to seven years to mature. The sustainable supply of Tongkat Ali is about 100 tonnes a year from the government and the private sector.

"The government has 167ha of this plant and the private sector about 29ha, mainly in Kelantan, Pahang, Selangor and Negri Sembilan."

Only 80ha of Tongkat Ali that were planted in 2002 and 2003 will be harvested this year, says Rashid.

"We can get four tonnes a hectare. So, from the 80ha available we will have 320 tonnes this year. We are still

doing fine.

"The problem is that our future needs will be larger and we need bigger players to sustain the current demand."

This should be an immediate concern to Malaysian men as Tongkat Ali has penetrated the Japanese market, bringing in about RM3.8 billion a year.



When there are no more natural sources of Tongkat Ali, the price is going to go up."

Datuk Dr Abdul Rashid Ab Malik  
FRIM deputy director-general (research)

"The Japanese demand is expected to increase and Tongkat Ali exports to Japan are expected to be worth RM8 billion next year."

Even without the Japanese factor there will be a shortage in four to five years as there are no big players who are continuously planting the tree that will be producing the herb, he says.

Rashid knows for FRIM monitors the commercial planting of Tongkat Ali.

The price of this plant, he says, might also not be as affordable as it is now.

"The cost of production of Tongkat Ali from the plantation is about RM7.50 per kg while the selling price is between RM8 and RM10."

Orang Asli gather the plant from the forests for a nominal sum for middlemen.

"When there are no more natural sources of Tongkat Ali, the price is going to go

up."

Increasing demand from other countries is also causing prices to skyrocket, says Rashid.

"On a trip to the United States, I found Tongkat Ali products on the shelves. The extract is sent overseas and packaged there. In one store our famous herb is called 'Long Jack'."

"Tongkat Ali has male enhancing properties, like a form of steroid, but is safe and natural."

"The most popular Tongkat Ali products in the market are health drinks, tablets and food supplements."

"But there's also a new demand for this herb in the fitness arena. The demand keeps increasing with every research and development study. It was recently found that Tongkat Ali is good for bodybuilders."

Rashid says a study published in the British *Journal of Sports Medicine* showed that Tongkat Ali can increase

muscle strength.

"There are so many uses for this herb, even in the medical line. Tongkat Ali is also shown to prevent lung and breast cancer."

"Tongkat Ali has properties similar to ginseng and red ginseng. Malaysia should take advantage of this, like the Koreans who are harvesting it commercially on a large scale."

He says despite the demand, there is no sense of urgency from big commercial firms.

"We are fearful of what might happen if we wait too late to take action."

In the meantime, FRIM has been looking at ways of cultivating Tongkat Ali in the fastest and most cost effective way possible.

"We have started using hairy root culture as an alternative way to growing Tongkat Ali. The controlled environment has proved to be very effective."

"We are now ready to move to the pre-commercial phase which will take two more years. By 2011 we hope to commercialise the hairy root production of this much-loved plant."

| TONGKAT ALI PLANTATIONS IN PENINSULAR MALAYSIA               |                 |
|--|-----------------|
| Public Sector  | Size (hectares) |
| 1. Malaysian Rubber Board                                    | 48              |
| 2. Malaysian Agricultural Research and Development Institute | 18              |
| 3. South Kelantan Regional Development Authority             | 45              |
| 4. Golden Hope   | 14              |
| 5. Federal Land Development Authority                        | 30              |
| 6. Malaysian Forestry Department                             | 10              |
| 7. Forest Research Institute Malaysia                        | 2               |
| <b>Total</b>   | <b>167</b>      |
| Private Sector   | Size (hectares) |
| 1. Cikgu Hanafi, Kelantan                                    | 5               |
| 2. Mutiara Murni   | 2               |
| 3. Selangor Agricultural Development Authority               | 10              |
| 4. Federal Land Development Authority                        | 1               |
| 5. Penawar   | 2               |
| 6. Individual, Kedah   | 1               |
| 7. Nasoha  | 4               |
| 8. Herbal Kenyir Park  | 4               |
| <b>Total</b>   | <b>29</b>       |

## Sustainable method of supply



Hairy root culture does not require hormones or vitamins, just a simple medium of salts and sugars.

*IN VITRO* cultures of Tongkat Ali are the best alternative to ensure the sustainable supply to herbal industries, thus protecting the wild plant population from depletion.

Hairy roots (highly branched roots covered with a mass of tiny root hairs) were induced from Tongkat Ali explants (small pieces of tissue) by infection with *Agrobacterium rhizogenes* (soil bacterium).

(Hairy root culture does not require hormones or vitamins to grow, it can grow on a simple medium of salts and sugars.)

The hairy roots were successfully multiplied in solid and liquid medium. Bioactive compounds of Tongkat Ali were found in the ex-

### tracts of hairy roots

The hairy root cultures have three main advantages — genetic stability, cultivation without an addition of growth regulators, ability to give high final biomasses — lessening pressure on natural sources of Tongkat Ali from the forest.

This technology also helps in conservation efforts.

Since Tongkat Ali is a slow growing plant and can be harvested for its roots only after five years, hairy root culture is considered the best alternative and promises a sustainable source for Tongkat Ali production.

Source: Dr Nor Hasnida Hassan, FRIM

## ROOT TO ALL CURES

*EURYCOMA longifolia* or Tongkat Ali, is a tall shrub tree that grows wild in the jungles of Southeast Asia.

It has an umbrella-like compound of leaves crowning each branch and can grow to a maximum length of 2m with a maximum diameter of 20cm.

It is found on sandy soil at low altitudes with organic matter and takes five to seven years to harvest. It is sought as a remedy for a variety of illnesses such as:

- Aches
- Fevers
- Malaria
- Tonic after childbirth
- Ulcer
- Cancer
- Sexual deficiency



Tongkat Ali root is much sought after to cure illnesses.