

## ***EURYCOMA LONGIFOLIA* IMPROVES COPULATORY ACTIVITY OF SEXUALLY SLUGGISH RATS**

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*Eurycoma longifolia* Jack, known as “Tongkat Ali”, is a shrub-tree commonly found in the forests of Southeast Asia. In Malaysia it has gained a reputation as a male aphrodisiac because it is claimed to increase virility and sexual prowess when taken as a decoction of roots in water. The aphrodisiac property of *Eurycoma longifolia* Jack has been already studied in castrated or in middle-aged male rats. In the present study we investigated the influence of acute and subacute treatments with *Eurycoma longifolia*'s root powder (supplied by bioera) on copulatory behavior of sexually sluggish male rats.

Adult Sprague-Dawley rats, submitted to seven pre-experimental training tests with sexually receptive females, were defined sexually sluggish when achieved ejaculation only in one or two of the last three tests. Root's powder of *Eurycoma longifolia*, solubilized in tragacanth gum and water, was acutely administered at the dosage of 1 g/kg 45 min before the experiment or subacutely for six days at the dosage of 0.5 g/kg/day, by oral gavage.

The acute administration of *E.longifolia* in sluggish rats improved copulatory performance as shown by a significant ( $p<0.01$ ) reduction in ejaculation latency ( $LE=326.8\pm 82.7$ ) in comparison with the corresponding value of vehicle-treated rats ( $LE=1067\pm 183.5$ ). Moreover in the same animals a marked increased in the percentage of mounting and ejaculating rats was observed. The subacute administration of *E.longifolia* failed to affect ejaculation latency but significantly reduced post-ejaculatory interval ( $p<0.05$ ) in comparison with control rats. The percentages of mounting and ejaculating animals were increased by the subacute administration but in a lesser extent in comparison with the acute administration.

In conclusion, *Eurycoma longifolia*'s root powder is able to improve copulatory performance of sluggish rats following acute or subacute administration.

This study supports the use of the plant in the traditional medicine for its ability to affect in a positive way the copulatory activity. It must be stressed, however, that there is apparently no advantage to assume the drug chronically.