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[生物] 中興大學證實芬多精具安眠鎮痛功效

[生物] 中興大學證實芬多精具安眠鎮痛功效

國立中興大學森林系副教授王升陽與獸醫病理學研究所副教授廖俊旺進行芬多精研究,這是國內首次有研究報告證實芬多精的成分及功效,這項成果刊登在二月出刊的第55期《木材科學(Journal of Wood Science)》。

由於芬多精的採集技術相當困難,國內一直沒有關於芬多精的研究報告出爐,國外的研究也相當少見。 中興大學研究團隊使用了2種方法,一種是用微固相萃取法,另一種是利用合成樹脂,配合可攜帶式的幫浦採集林中的空氣。在將採集到的空氣分離出芬多精後,利用氣相質譜分離、鑑定芬多精的組成,其中,萜類化合物是不同林相中的芬多精所共有的主要成分。該研究還發現芬多精的組成與利用水蒸氣蒸餾的柳杉精油的成分相類似,於是進一步以柳杉精油進行動物試驗,發現了柳杉中的芬多精及其主要的萜類成分 - 「檸檬烯」,對動物中樞神經系統有相當大的影響,而且具有安眠、抗焦慮及鎮痛的功效。此外,也在實驗中發現,小鼠即使服用極高的柳杉精油,也無毒性反應的產生,證實使用柳杉精油有極高的安全性。

深入資訊:

中興大學興新聞 2009/02/25

[Biology] NCHU Research Team Proves Pythoncidere Is Hypnotic And Analgesic

Associate Professor David Wang from the Department of Forestry and Associate Professor Jiunn-Wang Liao from the Graduate Institute of Veterinary Pathobiology, National Chung Hsing University (NCHU), present their research findings on the fifth Journal of Wood Science in February. This is the first report proving the elements and effects of pythoncidere.

Because it is not easy to collect pythoncidere, there has been no academic report on pythoncidere in Taiwan until now. Relevant researches are so far rare, too, internationally. The research team of NCHU uses two methods of collection: one is solid-phase microextraction; the other is to collect the air in the forest with synthetic resin and portable pump. After pythoncidere is extracted from the collected air, its components are analyzed and recognized with gas chromatography-mass spectrophotometer (GC-MS). Among the recognized components, terpene is found in various air samples. Part of the findings shows the composition of pythoncidere is similar to that of the steam-distilled Cryptomeria japonica essential oil, based upon which an experiment about the Cryptomeria japonica essential oil's effect on animals is conducted. This leads to a further finding that the major element of terpene "limonene"is quite effective to central nervous system, and it can be hypnotic, anxiolytic and analgesic. Besides, the experiment also proves that Cryptomeria japonica essential oil is quite safe for the mice that take high-dose essential oil do not show obvious toxic reaction.

Further Information:

NCHU News 2009/02/25 (in Chinese)