

*Demonstration AS STUNNING MATERIAL IN
LIVE FISH TRANSPORTATION*

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2009

UNIVERSITI TEKNOLOGI MALAYSIA
JALAN SEPANG, SEREMBAN, NEGERI SEMBILAN

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***Derris elliptica* AS STUNNING MATERIAL IN LIVE FISH IN LIVE FISH
TRANSPORTATION**


**By
Faizeli bin Abdullah**

**Research Report submitted in partial fulfillment of
the requirements for degree of
Bachelor of Agrotechnology Science (Post Harvest Technology)**

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UNIVERSITY MALAYSIA TERENGGANU
2009**

DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which has been duly acknowledge

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Date : 10 APR 2009

ACKNOWLEDGEMENT

Alhamdulillah, praise and thank to Allah, the merciful God answering my prayers, gave me good health and giving me strength and patient finishing this project. Secondly, I would like to thank my beloved parents and sibling for their everlasting supports and thoughts throughout my life.

My greatest gratitude to my supervisor, my Sifu, Assoc. Prof. Dr. Buhri bin Arifin, because giving me countless of suggestions, invaluable idea and constant guidance in making this project successfully finished. Also thanks to Sifu for morals and unformal lessons of guiding me to be a better man.

I would prolong my thanks to my roommate, Ainul Shah Bachok, my closest friends, Nor Azian Duriat, Noor Anizah Maarof, Nur Azlin Azhari, Najuwah Halim, Nurul Izzah, housemates, Anas Annuar, A. Zikri, Afiq, all my classmates and my friends for helping, supporting, and being there for me.

Last but not least, my appreciation goes to the lab staffs, Pn. Mizatul Akma, Pn. Rafidah, En. Shahrul, En. Kamarul, En. Zuhairie, En. Fauzi and Pn. Rokiah, freshwater hatchery staffs, and those who contributed in this project.

ABSTRACT

In past few decades, demand for fresh, live fish has increase, especially in Asia. This has encouraged the trade of live fish but there are problems occur especially in transporting aspect. Fish are stressed due to unstable condition of transporting or packing and some died while transporting. To avoid this, fish can probably be stunned to make their metabolism fall and low movement of fish thus, low level of stress and fish will survived. But some stunning methods are not efficient and some materials are harmful. This will affect the quality of fish meat. This project's aim is to determine whether *Derris elliptica*, of locally known as "Akar Tuba", can be used as an organic stunning material to stun freshwater fishes. Java Barb was used in this experiment. This experiment were conducted to see the effectiveness of "Akar Tuba" as stunning material and to find adequate concentration to stun fish. The sample fishes were placed in plastic bags, containing 2L of water. Excess air is removed and replaced with pure oxygen. Extraction of *Derris elliptica* were mixed with the water in the packaging bags according to the determined concentration level, 25mg/L, 50mg/L, 100mg/L and 200mg/L. The sample fishes the observed for their behavior and the time of the effects to begin and stunning period are taken. The outcome of this experiment proved that *Derris elliptica* has possibility to be used as an organic stunning material in live fish transportation. Treating fishes with concentration 50mg/L and 100mg/L are the suitable range of concentration to stun fish and not killing or harm them.