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# “Kachil ravi” turns waste to organic fertilizer”

**R. Raveendran and P.S. Swathi lekshmi**

Karshaka Sreeman, Thiruvananthapuram, 9048282885

ICAR, Central Marine Fisheries Research Institute, Vizhinjam, swathi.lekshmi263@gmail.com

## Introduction

Shri. R. Raveendran, lovingly called as “Kachil Ravi” is a progressive farmer from Ulloor in Thiruvananthapuram district of Kerala. The nick name connotes to his unique achievement of producing the largest giant African white yam (Kachil in Malayalam, Weight-275 Kg) which has been listed as the world heaviest of its kind in Limca Book of Records, 2011. Shri. R. Raveendran, became popular due to his remarkable production of organic fertilizers also. He used discarded portions of fishes such as head, gills, scales and entrails to produce an aminoacid supplement for plants. “Hridhayamruth” and “Mutta Mishritham” are other low cost organic fertilizers made by him. He also makes fertilizer based on vermicompost utilizing organic wastes (Vermiwash) and cut pieces of human hairs collected from salons and parlours (human hair vermicompost).

## Awards and Recognitions

- Innovative farmer award, Indian Agricultural Research Institute (ICAR), 2014
- Fellow farmer award, ICAR, 2017
- National Award for the best farmer, 97th Indian Science Congress, 2010
- “Uthradam Thirunal Marthandavarma Award” for the best farmer, Kerala state
- Award from National Biodiversity Congress, India
- Award from Kerala State Biodiversity Board

## Description of solid waste

Biodegradable organic waste (discarded portions of fishes such as head, gills, scales and entrails, leaves from plants, pieces of human hairs collected from salons and parlours etc.) are getting utilized here.

## Mode of collection/transportation/processing

The land based wastes are collected and transformed to organic fertilizers like,

“Hridayamruth, fish amino acid supplement, Vermi-wash, and human hair vermicompost”. Fish waste is procured at free of cost from fish markets and from neighboring houses by employing a labourer. “Hridayamruth” is made by mixing green leaves of fragrant plants to non-fragrant, bitter and sappy varieties in Jaggery solution. ‘Muttamishritham’ is made by dipping local/country chicken eggs in lemon juice solution followed by addition of jaggery. For “Vermiwash”, organic wastes are collected and fed to earthworms of the species *Eudrilus eugeniae*. The excreta of these earthworms are collected from the compost unit and used as fertilizers. The solid portion will (organic fertilizer) and liquid portion (vermiwash) will be separately used. Further, human hair (collected from salons and parlours etc.) is also effectively utilized in vermicompost.

## Impact

There was no system for waste disposal in the working areas before he has started. The public was desperately seeking a place for dumping fish waste either on road sides, canals and vacant plots. Shri. R. Raveendran could successfully convert this simple waste including marine fish waste in to an economically useful by product. Additionally, use of organic fertilizers could avoid the problems and hazards associated with the use of chemical fertilizers. Shri Raveendran is of the opinion that Fish Amino Acid is a super organic fertilizer that increases the yield of crops tremendously and so does it increase the income of the farmer. He attributes the success of producing the 275 Kg African White Yam to the use of his fish amino acid supplement. He also motivates the farmers and housewives through regular farm field schools. More than 400 people have got trained in the Farm school conducted by him under the Agriculture Technology Agency Programme (ATMA), Department of Agriculture, Government of Kerala.

## Adoption of this method by others

The farmers and housewives are regularly getting trained through farm field schools. Many people including farmers and end users from many parts of India and abroad started adopting and producing organic fertilizers through the technology developed by Shri. R. Raveendran.

## Economic aspects

The raw material for production of fish waste based amino acid supplement is procured at free of cost from fish markets and from neighboring houses. He employs a laborer for collection of fish waste at a cost of Rs. 300 per 10 Kg of fish waste. Net profit for 50 l of this amino acid supplement is calculated as R.11700/-.

## Conclusion

Shri. R. Raveendran could successfully convert various organic wastes waste (which otherwise goes discarded in public places) into useful organic fertilizers of immeasurable value in economically feasible ways. He also encourages other farmers, friends and neighbors to follow the technology through regular farm field schools.