Fish and Water Chestnut Co-production System

Water chestnut with fish culture

Developed by

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RELEVANCE

- In India, pani singhara is grown in the states of Bihar, M.P., West Bengal, Odisha, Assam, U.P., Maharashtra, Punjab, and Tamil Nadu, preferably in waterlogged bodies with water depths of 3-5 feet.
- In an integrated fish and aquatic crop cultivation system, Magur (*Clarious batrachus*) and water chestnut could be grown together.

DESCRIPTION

- Integrated cultivation of catfish with water chestnut reduces more than 65% of pest attacks by water chestnut beetle (*Galerucella birmanica*), as mangur acted as a predator to *G. birmanica*.
- In this system, water chestnut yield of 18-24 t ha^{-1} and Magur yield of 1.2-1.7 t ha^{-1} can be achieved.
- Further in this co-production system, fish get 28-32% natural food in the form of planktonic, periphytic, and benthic food that helps in reducing 25-30% supplemental feed input.

BENEFITS

- The availability of natural fish feed and the reduction of supplemental fish feed increase the system's overall productivity and profitability.
- System's net water productivity goes up to ₹ 11.6 m^{-3}.
- Easily replicable dual-production farming system.