

Growing of giant freshwater prawn in recirculation water



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Investment project

Idea

The idea is to grow giant freshwater prawn in recirculation water in any heated space area of 150 m². This system allows you to grow prawn all year round. With recirculation systems you can produce up to 300 kg of prawn for 180 days. For comparison - the same amount collected from 1 ha of ponds.



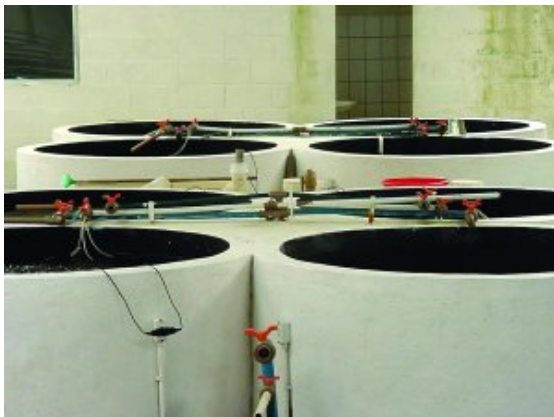
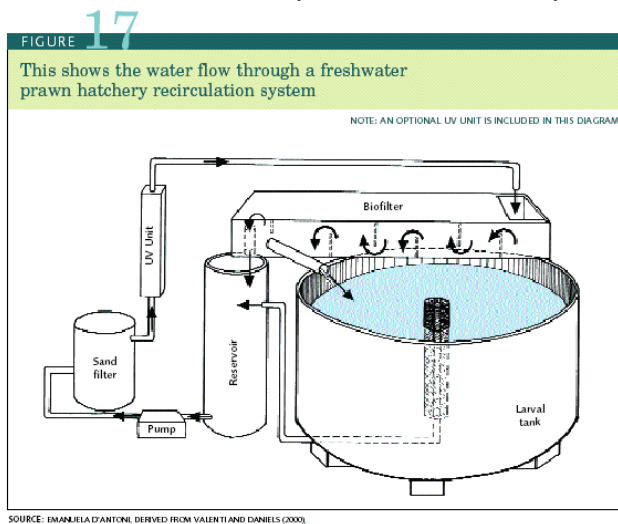
The giant freshwater prawn

The giant freshwater prawn (*Macrobrachium rosenbergii*) lives in Southeast Asia. Under natural conditions, reaches a size of 32 cm and a weight of 250 grams. Shrimp lives up to 4 years. The female produces up to 200 000 eggs. Lives in freshwater water. For the development of larvae sea water is needed. Favorable temperature is + 28-32g. Giant shrimp has a very high growth rate. Weight of 40 - 60 g shrimp gains for 6 months. Individual specimens can weigh up to 100 grams. Meat of the giant shrimp is an expensive delicacy and has excellent taste.



Aqua farm for prawn production

- Aqua farm consists of two units: the incubator and main production.
- Main production is a system of 8 to 10 modules (tanks), which will provide the first batch of prawns after 180 days.
- Removing the second and subsequent harvests will occur every 45 days.
- Investment amount to aqua farm for 5 000 kg of prawns per year is estimated from 90,000 € to 120,000 €.



Recirculation system

- Installation of closed water recirculation supply: 25 000 €
- Space for installation: 150 sq. m.
- The unit consists of:
 - Tanks : from 3,500 euros;
 - Pipelines : from 2,500 euros;
- Water filtration system (biofilter, a mechanical filter, oxygenator unit pumps): 18 000 euros.
- Electricity consumption: 3.7 kWh.
- The source of oxygen: the oxygen generator, high pressure cylinders or liquid oxygen.
- The temperature of the water to ensure normal growth and development of the shrimp should be within 25^o-30^oC.

Approximate calculation of the annual profit for prawn production 5 000 kg per year

EXPENSES:

Feeds:	5000 kg of feeds x 0,45 €/ kg =	2250 €
Wages 2 workers :		18000 €
Utility costs (water, electricity) :		6000 €
Other expenses:		3250€

Total general expenses : 29500 €

INCOMES:

The wholesale price of live prawn is 14 €. Growing and sale of 5,000 kg of prawn per year gives a turnover of 70,000 €

Profit (before taxes):

$$70\ 000\text{€} - 29\ 500\text{€} = 40\ 500\ \text{€}$$



Figure 1. Giant freshwater prawn (*Macrobrachium rosenbergii*)