

PROFITABILITY OF COBIA (*Rachycentron canadum*) CAGE CULTURE IN BRAZILIAN COAST

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Currently in Brazil, cobia (*Rachycentron canadum*) culture has attracted the interest of research institutions and the private sector. Despite the success of its culture in other countries, it is important that be undertaken studies to assess the preliminary technical and economic feasibility of cobia production on Brazilian coast. In order to better understand the cobia's culture in Brazil, an experimental culture of this specie was held at the Jaconema Beach located in the Bay of Ilha Grande (Angra dos Reis, RJ, Brazil). This research analyzed the economic feasibility of cobia cage culture.

In 369 days of culture the juveniles reached an average weight of 4,5 kg with an specific growth rate of 2,16% per day. During the culture the average temperature was 25,3 °C, the salinity 28,5 and the initial stock density was 1,8 kg/m³ attaining at the end of culture 15 kg/m³.

The unit cost is US\$ 15,93, the market price usually is US\$ 7,50 and the fish value is US\$ 33,75 with the average weight of 4,5 kg. So the gain per fish is US\$ 17,82.

The economic viability of this culture has an attractive cost of implementation for coastal communities and still has several alternatives that allow a cost reduction. This nearshore culture appears as a promising activity since this region has suitable characteristics for cobia culture, cobia has an excellent performance in the region, the government is promoting the family-owned cage culture and this activity can become an alternative source of income for coastal communities.

Production costs				
Annual grow-out production of cobia juveniles 1.0 g to 4.5 kg				
Operation with 2 cages		Global	Production value	
Production No. of fish		%	Cost	Total
Juveniles grow-out	600	100.0%	15.93	\$ 20,360.00
	2,500		Unit cost	\$ 15.93
Total	4,500	100%		
			Market price	
			kg	\$ 7.50
			kg/m ³	\$ 33.75
			Quintal	\$ 17,82
			Production: 369 days during one year culture is 40%	
Juveniles				
No. of juveniles	1,000			
Cost/juvenile	2.50			
Transport	1,500.00			
Total cost juvenile		27%		
Cost/juvenile				
Direct Costs				
Feed	2,500.25			
Feed 5 year cost				
Total Direct Cost	\$ 2,500			
Cost Feed/juvenile	\$ 4.25	27%		
Spending wages				
Labor	1,740.00			
Total spending wages	\$ 1,740			
Cost Wages/juvenile	\$ 2.90	18%		
Operation wages				
Value cycle 1 year	Value cycle 36 days			
Star + gas	556	63%		
Electricity wages	1,000	140%		
Total operation wages	\$ 2,676			
Cost Operation/juvenile	\$ 4.46	28%		
TOTAL COST	9,086			
TOTAL WAGES	7,000			
Total cost per juvenile	\$ 15.93			
Operational cost per juvenile	\$ 15.93	100%		

Final Product: Average fish production with 4.5 kg and some reached more than 6 kg, ready to harvest

\$ is US dollar