Subadult octopus (*Octopus vulgaris*, Cuvier, 1979) fattening with artificial and mixed natural diet.

C. Rodriguez[1], J. Cerezo[2], A. Guerrero[1], J.F. Carrasco[3], S. de la Uz[1], J. López[1] and B. García[2]

(1) Centro de Experimentación Pesquera. Dirección General de Pesca Marítima. C/ El Muelle, s/n. 33760 Castropol. Asturias. *carmen.rodriguezrodriguez@asturias.org*
(2) IMIDA. Consejería de agricultura y Agua de la Región de Murcia. Puerto de San Pedro del Pinatar. 30740 San Pedro del Pinatar, Murcia.
(3) Centro de Experimentación Pesquera. Dirección General de Pesca Marítima. Av. Príncipe de Asturias, s/n. 33212 Gijón. Asturias.

INTRODUCTION

The common octopus (*Octopus vulgaris*, Cuvier, 1797) is a species with great potential in marine aquaculture, however, its industrial development is limited by the difficulty of larval culture and the absence of suitable artificial diets according to its composition, appearance and texture, which may be accepted and eaten by Octopus, (García and Cerezo, 2006).

MATERIALS AND METHODS

- Pool volume: 24.000L
- 18 males were introduced separated in 6 groups of 3 individual.
- Average weight: 800 – 1.100 g
- Two diet: natural mixed diet and prepared diet
- 3 replicates for each diet type.
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- Feeding schedule: 5 days a week to satiety
- Duration: 56 days
- Temperature: 19,5ºC
- Salinity: 33±1
- Oxigene: :>80%

Natural mixed diet

Mussel

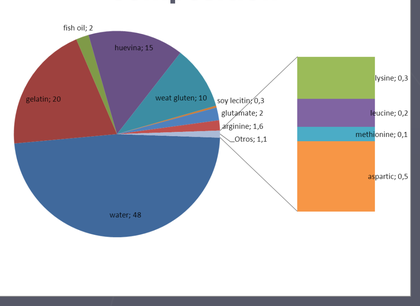
Fish

Crab

Artificial diet

Semi-moist diet

Composition



RESULTS

	Natural mixed Diet	Artificial Diet
Initial total biomass (g)	8 830	8 420
Average initial weight (g±sd)	981±193,51	935,5±66,72
Final total biomass (g)	10 075	5 910
Average final weight (g±sd)	2 015±217,51	1 182±170,49
Weight increase ($g \cdot day^{-1}$)	18,46	4,40
Specific growth (%)	1,28	0,41
Mortality(%)	44,44	44,44

DISCUSSION AND CONCLUSIONS

- The replacement of gelatin and alginate by varying the composition of the feed was not enough to get an attractive and nutritious food for the development of the octopus.
- The growth with prepared feed was always lower than that obtained with natural diet, even in this case where the growth with the natural diet was much lower than that obtained in other experiments conducted with natural mixed diets.
- These low values of growth could be related to the starvation days and the competition for food, despite being homogeneous groups in terms of size.
- The highest mortality recorded, despite the low density of storage values would be associated with starvation days and nutritional deficiencies of the feed, which resulted in a strong competition for food and cannibalism in all groups of both diets.

BIBLIOGRAFÍA

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