

Inclusion of squid meal in extruded diets for *Octopus vulgaris*.

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This work studies the growth and body composition of several *Octopus vulgaris* fed with two formulated extruded diets, FMS and 3FMS, based on different fish and squid meal ratios (1:1, and 3:1, respectively). The results were compared to a control diet based on crab (*Carcinus mediterraneus*) and bogue (*Boops boops*).

The animals showed a 100% survival rate in all cases. The best growth results were obtained in the control group, with a specific growth rate of SGR = 2.14% BW/day, while the octopuses fed with the extruded diets showed values around 0.69 %BW/day, with no significant differences between the FMS and 3FMS groups.

The two extruded diets promoted slight differences in the muscle composition and important differences in crude lipid of the digestive gland, the values were 9.8 for control group and 20, 9 and 19, 4 for FMS and 3FMS respectively.

Digestibility of dry matter was high in extruded diets, 86.9% and 89% for FMS and 3FMS diets, respectively. The results suggests that both shrimp and fish meal can be used in dry pelleted extruded diets with good acceptance by the octopus, even though the formulation must be optimised in order to achieve growths similar to natural diets.