

Looking for an optimal extruded diet for *Octopus vulgaris*

P. Querol, S. Martínez-Llorens, A.V. Moñino, M. Jover, A. Tomás-Vidal

¹*Research Group of Aquaculture and Biodiversity, Universitat Politècnica de València, Spain.*

Octopus vulgaris exhibits a rapid growth rate (about 13% body weight/day), but it needs an efficient and economic feed. Actually, various artificial diets are in proving, mainly moist diets, which achieved growth from 0.22 to 1.5% BW/day (Cerezo *et al.* 2008; Quintana *et al.* 2008; Estefanell *et al.* 2011; Garcia *et al.* 2011; García-Garrido *et al.* 2011), but the disadvantages are similar to natural food, high cost of storage and complexity in manufacture. Extruded diets could be alternative; the results of 9 extruded diets in 4 different tests are summarized in this work.

Stability of diet is important, because Octopus manipulates pellets during long time and eating slowly, gelatin and maltodextrin were used. To promote acceptability, flavour enhancers (yolk) were added (Querol *et al.* 2012a). The acceptability of fish and krill meal was proved (Querol *et al.* 2012b), improving the growth with high levels of fish and krill meal (Querol *et al.* 2013). For supplying arginine requirements (Cerezo *et al.* 2012) and to reduce krill meal diet due to its low digestibility (Hamdan *et al.* 2013), krill meal was replaced by shrimp meal in last trial, obtaining the highest value of SGR.