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FOOD COLORANT AS DIET MARKER TO SELF-SELECTION EXPERIMENTS FOR EUROPEAN SEA BASS *Dicentrarchus labrax*

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European sea bass ability to discriminate red, orange and yellow color diets was evaluated to self-selection feeding stimulants experiments. The purified diets were formulated to be isoproteic (46% CP) and isoenergetic (4200 kcal/kg GE). Red and orange food colorants were added to differentiate diets. Diets were supplemented with no colorant (control), orange and red at 0.2% and replaced by same amount of corn starch. Control diet showed yellow pallid color. Fish (307.8 ± 54.5 g) were stocked in four 75-L aquaria (3 fish/aquarium) with flow-trough recirculating system with artificial seawater. Aquaria were placed in isolated chambers with controlled temperature 23±1°C, photoperiod 12L:12 D (200 lx: total darkness), salinity 28 ± 2‰ and equipped with mechanical and biological filter. Adults were fed handly once a day (10:00-h) at 2.4% of total biomass (0.8% of each experimental diet) during 10 days. Diets were weighted separately and before feeding were mixed and offered in each aquarium to give fish free choice to select diets, with previously water flow and aeration turned off. Fifty minutes after feeding, uneaten pellets in each aquarium were siphoned out and counted. Feed intake was calculated by subtracting the total weight of fed pellets by dry weight of uneaten pellets that was estimated by multiplying the number of pellets by the average pellet dry weight and expressed as (g/kgBW/ day). Percentage of self-selection was measured by the relation between the number of eaten pellet and the number of suminstred pellet (estimated by average dry weight). Average self-selection and feed intake were analyzed by Tukey's test. Results demonstrated that sea bass was not able to discriminated yellow, red and orange color diets. Thus, the use of diet colors (red, orange and yellow) is adequate to carry out self-selection feeding stimulants experiments for European sea bass.

KEYWORDS: marine fish, nutrition, pellet diet.