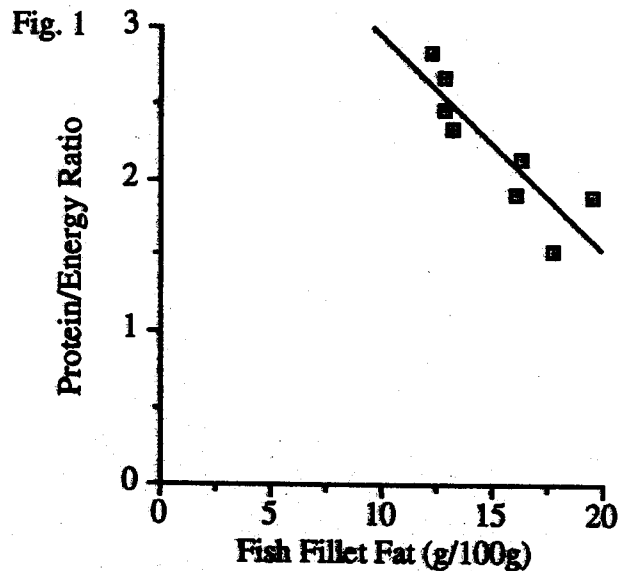


THE EFFECTS OF VARYING DIETARY PROTEIN/ENERGY RATIOS IN THE FAT CONTENT AND FATTY ACID COMPOSITION OF SILVER PERCH (*BIDYANUS BIDYANUS*)

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The demand on fish farming has risen during the past decade. It has been reported that by changing the diet the total fat content and fatty acid composition is altered. This study looked at the total fat content and fatty acid composition of silver perch (*Bidyanus bidyanus*) when fed different protein/energy ratio diets.

Aquarium tanks (72) were set up under dim light at approximately 26°C. Fingerlings were measured, weighed and 10 of similar size were placed in each tank. Twelve different ratio diets were prepared and each had six repetitions. After 10 weeks the fingerlings were weighed, harvested, homogenised and dried. Lipid was extracted by the Folch method and fatty acids will be analysed by gas chromatography.



Varying the protein/energy ratio in the diet of the fingerlings influenced the fat content in both the fillets and the whole fish. As the protein/energy ratio increased the amount of fat in the fingerlings fell (Fig. 1). Results also indicated that as the dietary fat increased so did the fat content in the fingerlings.

This study has shown that the amount of fat in the diet of farmed fish will influence the deposition of fat in the tissue of the fish. The higher the protein/energy ratio in the diet the leaner the fish.

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