REDUCTION OF AQUACULTURE FEED COSTS

Karl Shearer
Northwest Fisheries Science Center
NMFS, NOAA, 2725 Montlake Blvd E.,
Seattle WA 98112, USA

Feed costs comprise from 40 to 60 percent of the cost of rearing salmonids to market size. The protein fraction of the diet is responsible for more than 60% of the cost of the diet. Research has, I feel, been misdirected toward reducing feed costs ($/kg feed) through the substitution of less expensive animal and plant proteins for fish meal. Relatively little attention appears to have been paid to improving feed efficiency (kg feed/kg fish produced) which also affects production costs:

$/kg feed x kg feed/kg fish produced = $/kg fish produced

Inefficient diets lead to additional feed handling, do not allow fish to grow to their potential and contribute to pollution. Factors that contribute to poor feed efficiency are: feed loss, poor digestibility, improper protein/energy ratio, poor amino acid balance and high levels of carbohydrate, fiber and ash.