COMPARISON BETWEEN REARING DONKEY’S EAR ABALONE (*Haliotis asinina* Linnaeus, 1758) WITH FRESH ALGAE, DRIED ALGAE AND PELLET DIET

Phenkae Kunawongdet¹, Wichien Sakares¹, Pisamai Somsueb² and Supicha Kaewmanop¹

¹Kung Krabaen Bay Fisheries Development Study Center, P.O.Box 17, Klong Kud, Thamai, Chanthaburi 22120, Thailand
²Inland Feed Research Institute, Inland Fisheries Research and Development Bureau, Department of Fisheries, Thailand

**ABSTRACT**

Donkey’s ear abalone (*Haliotis asinina* Linnaeus, 1758) were fed with 3 types of food; fresh algae (fresh *Gracilaria fisheri*), dried algae (freeze dried *G. fisheri*) and pellet diet. The experiment was Completely Randomize Block Design; included of 3 treatments with 3 blocks. By using 3 sizes of abalone to be blocks. Abalones of each blocks was reared at 90 pieces/ cubic-meter of water which contained in 20x25x14 centimeter of basket hanged in 47x61x57 centimeter of plastic tank. Water was changed 100 % once a week. The period of experiment was 120 days.

The experimental result showed that the average body weight growth rate of each treatment were significantly different (p<0.05) to each other. Abalone fed with fresh algae was the highest followed by the fed with dried algae and the lowest was the fed with pellet diet. The average shell length growth rate of abalone fed with fresh algae was bigger and significantly different (p<0.05) to the fed with pellet diet; but not significantly different (p>0.05) to the fed with dried algae. The result of 3 Blocks showed body weight growth rate and shell length growth rate of the smallest size abalone was the highest growth rate and significantly different (p<0.05) to the middle size and the biggest size. The survival rate of each treatments and each blocks were not significantly different (p>0.05) to each other. Water qualities in the rearing tanks of the fed with fresh algae and the fed with dried algae showed Ammonia (NH₃-N) and Nitrite (NO₂-N) were lower and significantly different (p<0.05) to the water in the tanks of the fed with pellet diet.

**Key words:** Abalone, *Gracilaria fisheri*, fresh algae, dried algae and pellet diet