Study on Nursing of Abalone *Haliotis asinina* Linnaeus, 1758

*Veliger to 3.0 mm Shell Size in Plastic Box and Bag Culture*

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**Abstract**

Study on suitable nursing density of abalone *Haliotis asinina* Linnaeus, 1758 veligers in plastic bag culture (volume 18 liters) at five various densities of 1,000, 2,000, 3,000, 4,000 and 5,000 veligers per bag with 3 replicates was tested for 80 days culture period. The results showed that nursing of abalone veligers at density of 3,000 veligers per bag yielded highest production of 152.00±33.89 spats per bag with mean shell length of 3.67±0.06 mm and average survival rate of 5.07±1.13%. The suitable nursing density of 3,000 veligers per bag was selected to compare plastic bag culture with plastic box of the same capacity of 18 litres. Each treatment was tested with 3 replicates for 80 days culture period. The results showed that abalones attained from plastic box culture had average shell length of 4.38±0.03 mm higher than those in bag culture with average shell length of 4.20±0.08 mm with no significant difference (P>0.05). Nursing of abalone veligers in bag culture yielded both higher of number of spat productions and survival rate than box culture (P<0.05) with the average number of 153.00±29.22 spats and 75.33±15.37 spats per bag, and average survival rate of 5.10±0.97% and 2.51±0.51%, respectively.

Time requirement for nursery process of bag culture and box culture were not much different, but bag culture required less production cost than plastic box culture at 0.81 and 2.33 baht per spat, respectively.

**Key words**: abalone, *Haliotis asinina*, nursing, bag culture, plastic box

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