Abstrak

*Amorphophallus titanum* is famous as the gigantic inflorescence and prospective due to its 20% glucomannan contents. Various cultivation techniques including germination have been conducted. Previous studies revealed that *A. titanum* seed has not produced a faster and better germination rate. Therefore this research was aimed to test the following hypotheses: (1) Fruit pericarp and the pericarp inhibited the germination, (2) testa/seed coat inhibited germination, (3) GA3 hormone promoted the germination rate. The germination pattern was also monitored. The experiments consisted of: (1) Experiment 1: sowing the fruit with the seeds inside and (2) Experiment 2 with two treatments: testa peeling and GA3 hormone treatments. The results of Experiment 1 showed that the fruit pericarp and the pericarp inhibited the germination for 124 days. Experiment 2 resulted in: (1) the delay of the germination for 7-35 days caused by the testa/seed coat, (2) GA3 hormone promoted the germination rate 2.19 coefficient of germination rate; and higher GA3 (1000 ppm) may enhance the seedling growth (reached the highest 23.6 ± 1.3). We also recorded developmental stages from the seed germination, first-leaf emergence and tuber development in series of photographs overtime during the experimental period.