
**Abstract**

*Amorphophallus titanum* (Becc.) Becc. ex Arcang (the giant corpse flower) is a plant collection icon of Bogor Botanic Gardens. The inflorescence of *A. titanum* has always attracted many people in the world and plant science. A few botanic gardens or institutions worldwide have also grown this species. However, their reproductive biology characters have challenged their cultivation and domestication efforts. This species rarely produce fruit/seeds because the male and female flowers are not mature simultaneously. The success of the pollination indicated by fruit production depends on the interaction between the insects and the maturity of male and female flowers from different individuals. Therefore this study on the cross-hand pollination to produce seeds is very important to support the ex-situ conservation efforts of this collection in Bogor Botanic Gardens. Based on the observations, the flowering period of this species was at least every three year. The bloom of *A. titanum* number VI.C.484 (origin: Lahat, South Sumatera) which opened on 2 February 2012 was pollinated manually using (stored) pollen taken from the other flower number VI.C.485 (the same origin) which bloomed on 29 November 2011. The hand cross-pollination was successful and the first fruit (infructescence) to be produced here on 22 February 2012 marked the first success of manual pollination of the Titan Arum in Indonesia. On this research, the morphology of pollen of *A. titanum* was observed and their viability was tested.