Abstrak
The morphology of sporophyte, the type of reproduction, and cytology of Pteris had been reported, while the gametophyte morphology of Pteris in Java island has not been studied yet. The objective of this study was to describe the gametophyte morphology and development of P. biaurita, P. ensiformis, P. exelsa, P. longipinnula, P. tripartita, and P. vittata in Java island. Spores were obtained from fertile leaves of Pteris plants originated from several locations in Java island. The number of spores per sporangium was counted from fresh fertile leaves with mature sporangia. As much as 0.002 g spores was sown in a transparent box with sterile medium contain of vermiculite, sphagnum moss, and perlite with ratio 2:2:1. The gametophyte development of each species was observed under a microscope every 7 days. The spores of P. ensiformis were germinated faster, ten days after sowing, while the spores of P. longipinnula were germinated slower, 18 days after sowing. The pattern of spore germination is Vittaria-type. The development of gametophyte is Ceratopteris -type in common, but in a few cases is the Adiantum -type. The gametophyte development of observed Pteris species is varied in six characters including the number of filament cell, germinated time, the formation time of notch and gametangia, margin shape, and development type.