ABSTRACT
Identify the Variability of Wani Bali (Mangifera caesia jack.) According to Character of Morphology and Genetic. Wani (Mangifera caesia Jack.) is one of tropical fruit which belongs to genus Mangifera. In Indonesia there are many cultivars of wani with specific character. The best one is Wani Bali which grown and cultured in Bali Province. Consumers prefer the fruit due to the specific flavor, sweet and delicious taste, and thickness of edible pulp (aril). In this time, Wani Bali is still pertained local fruit that is only marketed in Bali and not yet penetrated market of Indonesia nationally. Research conducted for three years (2006, 2007, 2008), located at centrals of Wani Bali in Bali, with the aim to identify Wani Bali cultivars base on character of morphology and genetic variability. Research was consisted of several steps: (1) surveying of cultivars, (2) identification of their leaf, flower, and fruit characters; (3) collecting sample for RAPD analysis, and (4) test equality of the exclusive cultivar for developing with its generation. The result revealed that according to the fruit character (shape, taste, size, and skin colour of fruit) had been identified 22 cultivars, but among cultivars could not be specified by plant shape, branch type, leaf, and flower characters. There are 3 groups at 43% variability according to genetic variability of Wani Bali which was analyzed by RAPD. The exclusive cultivar genetically significantly different among the cultivars is Wani Bali Ngumpen (seedless cultivar) from Bebetin, Buleleng Regency. Cultivars planted at the same regency and/or at two neighbor regencies genetically were clustered in one group, excluding Wani Bali Ngumpen from Bebetin, Buleleng Regency. Genetically the exclusive cultivar Wani Bali Ngumpen and its generation which multiplied with seed is same, but still require to be proved furthermore.