

## ABSTRACT

***Ai Susanti, 2020. Morphological Analysis of Leaf Babadotan (*Ageratum conyzoides* L.) Plant Based on Altitude Differences. Guided by Dr. Cartonno M. Pd., M. T. and Drs. Suhara, M. Pd.***

*This study analyzed the Morphology of Leaf Babadotan (*Ageratum conyzoides* L.) plant based on the difference in altitude. Babadotan plant is a plant that grows at an altitude of 1-2100 masl and has a wide distribution. This research was conducted at several different heights, namely 200 meters above sea level (Sawahkulon Village, Pasawahan District, Purwakarta Regency), 400 meters above sea level (Taringgul Tengah Village, Wanayasa District, Purwakarta Regency), 600 meters above sea level (Rancamanyar Village, Baleendah District, Bandung Regency) , 800 masl (Dago Village, Coblong District, Bandung City), and 1000 masl (Ciumbuleuit Village, Cidadap District, Bandung City). This study aims to determine the changes in plant morphology of Leaf Babadotan (*Ageratum conyzoides* L.) at different heights. The research method used is descriptive method with purposive sampling research design and hand sorting sampling technique at various altitudes. Parameters measured were petiole length (petiolus), leaf length, leaf width, leaf thickness and stem width. The results showed that the average morphological changes of Leaf Babadotan (*Ageratum conyzoides* L.) plants that grew at an altitude of 200 masl, 400 m asl, 600 m asl, 800 m asl and 1000 masl showed a variation in morphology at each altitude. The size of the morphological characteristics which include the length of the petiole, the length of the leaves, the width of the leaves, the width of the stems at an altitude of 200 masl, - 1000 masl shows changes in numbers with fluctuating data and with a decreasing trend with increasing altitude. The results of statistical analysis also showed a significant difference, namely Babadotan which grows at an altitude of 400 masl (Taringgul Tengah Village, Wanayasa District, Purwakarta Regency) shows the largest individual variation compared to Babadotan (*Ageratum conyzoides* L.) plants from the four heights. other. This is caused by environmental factors that vary at each height.*

***Key words:*** Morphology, Babadotan (*Ageratum conyzoides* L.) plant, altitude