

SUMMARY

Cassava plants are superior food crops, after rice and corn. Cassava plants, like other plants, cannot be separated from pest attacks, one of these pests is the mite group (acarina). Mites are pests that interfere with the photosynthesis process of leaves, potentially reducing productivity. This study aims to determine the composition and diversity of pest mites on cassava cultivars at various altitudes. The research method used a survey method with a purposive random sampling technique. This research was conducted in August - September 2022. The sampling was carried out by picking pest mites from the leaves of cassava cultivars in 3 places, namely, sumbang village, banyumas regency, dukuh pring village and serang village, purbalingga regency which have the altitude of 128, 715, 1134 meters above sea level respectively. Five cassava cultivars represented each sampling location point. A total of 15 leaflets of cassava cultivars were required for each cultivar at each location. Each sample was analyzed and then brought to teaching laboratory 1, faculty of biology, universitas jenderal soedirman to observe pest mites using a stereo microscope. Temperature and humidity parameters were measured using a thermohygrometer. Data in the form of relative abundance and pest mites obtained were analyzed by analysis of variance of the complete random model at the 5% error level and then calculated the value of the diversity index using the shannon-wiener diversity formula. The results showed that there were 9 species namely *tetranychus kanzawai*, *mononychellus tanajoa*, *t.cinnabarinus*, *oligonychus gosspii*, *brevipalpus obovatus*, *t.urticae*, *t.putrescentiae*, *t.truncatus* and *euseius concordis* found at the sampling location. The results of the analysis of variance of the three altitudes of the place, there is no difference in the abundance of pest mites between altitudes. The results of pest mite diversity at 3 altitudes are classified as moderate, which means that the relationship between pest mites and predator mites on cassava plants is quite stable.

Keywords: *Composition, Cassava plants, Diversity, Pest mites.*