DIVERSITY OF ARTHROPODS ON POTATO PLANTS (*Solanum tuberosum* L) IN CENTRAL POTATO PRODUCTION AT BANJARNEGARA REGENCY AND KARO REGENCY

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ABSTRACT

Potato (*Solanum tuberosum* L.) is a horticultural crop from the tuber vegetable group that has the potential to serve as a carbohydrate source. Agricultural ecosystems host arthropod communities consisting of various species with different ecological roles. Differences in location are believed to influence arthropod diversity within these ecosystems. The of this research was to determine the arthropod diversity index in the potato production centers of Banjarnegara Regency and Karo Regency.The research was conducted in Kepakisan Village, Banjarnegara Regency, and Kuta Rayat Village, Karo Regency. Systematic sampling method was used, employing pitfall traps and yellow sticky traps placed at five sampling points, as well as purposive sampling through visual observations and the sweep net method. In the potato production center of Banjarnegara Regency, 36 arthropod genus were identified, with a total of 4,720 individuals, while in Karo Regency, 33 genus were recorded, with a total of 1,803 individuals. The arthropod diversity index in Karo Regency was higher, with a value of 2.09, compared to Banjarnegara Regency, which had a diversity index of 1.13.

Keywords : diversity, arthropod, potato plant