## ATTACK INTENSITY AND POPULATION DYNAMICS OF MAIN PLANT PEST ORGANISM (OPT) IN VARIOUS CROPPING PATTERNS OF GLUTINOUS CORN-EDAMAME Supervisor : Mahindra Dewi Nur Aisyah, S.P., M.Si.

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## **ABSTRACT**

The problem of corn-edamame cultivation is inseparable from attacks by Plant Pest Organisms (OPT). Other control alternatives are needed, one of which is with planting patterns. This study aims to determine the effect of various polyculture planting patterns on the level of attack and population dynamics of plant pests in sticky corn and edamame plants. This study was conducted from June to September 2024 in the agricultural land of Jalan Singosari Lingkungan Sumber Pak, Kebonsari, Sumbersari District, Jember Regency. The experimental design used was by comparing polyculture and monoculture cropping patterns consisting of 4 treatments. The results of the study showed that in endemic land conditions of downy mildew, symptoms of attacks such as armyworms, grasshoppers, whiteflies and downy mildew disease were found. Each plantdisturbing organism has its own potential against repellent plants. In the polyculture + lemongrass planting pattern, the lowest attack intensity was shown on armyworms and whiteflies. In the polyculture planting pattern, the lowest attack intensity was shown on grasshoppers and in the polyculture + basil planting pattern, the lowest attack intensity was shown on downy mildew disease.

Key words: Corn-Edamame, Plant Pest Organisms, Planting Pattern, Repellent.