

A COMPARATIVE STUDY ON THE EFFECTIVENESS OF NATURE FARMING
AND CONVENTIONAL FARMING TECHNOLOGIES ON
THE GROWTH AND YIELD OF DAPIT-SAKA

RICE SELECTION
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A Research Report

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ABSTRACT

Insects found feeding on rice at the early stage, that is, at three weeks after transplanting (WAT) were the rice whorl maggots (*Hydrillia philippina*), white leafhoppers (*Cofana spectra*), green leafhoppers (*Nephotettix virescens*), rice stemborers (*Scirpophaga innotata*) and grasshoppers (*Oxya hyla intricata*). Natural enemies observed included a mirid bug (*Cytorhinus lividipennis*), orange lady beetle (*Micraspis crocea*), damselfly (*Agriocnemis* spp.), and spiders (Lynx spiders, *Oxyopes* spp. ; dwarf spider, *Atypena formosana*; Orb spider, *Argiope catenulate*; and long-jawed spider, *Tetragnatha maxillosa*). It was noted that the use of nature farming technology and the absence of pesticides in the control had attracted more spiders. However, plants grown in conventional farming technology were significantly taller and had the most number of tillers both at maximum vegetative and productive stages. These favorably increased the population of white leafhoppers which likewise favored the surge of insect predators. As the number of insect pests increased on the sixth WAT, a number of species of the natural enemies also increased with the addition of vespid wasps and ground beetle (*Ophionea nigrofasciata*). The heaviest panicles were produced by plants applied with chemical inputs. These resulted in the highest grain yield of 3,466 kg/ha, a net

income of P19,643.00 and an ROI of 130.80 % . These values exceeded those of plants in the nature farm technology by 1,641 kg/ha, P14, 737.65, and 94.05 %, respectively.