

**EFFECT OF SEVERAL CROP RESIDUES ON GROWTH AND QUALITY
OF *Brassica rapa* (L.)**

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**This project report is submitted in partial fulfillment of the requirement of the
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ABSTRACT

The effects of chili, paddy and okra residues at different rates of application on growth of leafy vegetable, *Brassica rapa* L. and grassy weed, *Eleusine indica* was studied under glasshouse condition. Chemical analysis was conducted in a laboratory to determine nutrient levels of *B. rapa* after application of the residues. Chili and paddy residues were prepared by grinding the leaf and stem parts while okra pod was used to prepare the residues. The results show that the application of 1 and 2 t ha⁻¹ paddy residues increased ($P < 0.05$) the stem length of *B. rapa* by 33% but do not suppress the growth of *Eleusine indica*. However, phosphorus and nitrogen levels of *B. rapa* were reduced by 84 and 86%, respectively, when applied with 0.50 t ha⁻¹ okra pod residues. This result suggests that paddy residues have a potential to reduce the dependency on chemical fertilizers.