

**A PRELIMINARY STUDY TO DEVELOP
FERTILIZER BY USING SOLID BIOGAS
RESIDUALS**

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by

**WARAKAGODAGEDARA KOTAWELLE HITIBANDARALAGE
ANURA SAMPATH HITIBANADARA**

**Animal Science Degree Programme
Faculty of Animal Science and Export Agriculture
Uva Wellassa University**

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Abstract

The performance of radish plants which were grown under fertilizers by using biogas residual solids (BGRS) has been studied in diameter of the tubers, height of the plants, number of leaves, leaf area (LAI). The performance evaluation was conducted under seven different variations of treatments, biogas residual solids and poultry litter, biogas residual solids and gliricidia leaves, biogas residual solids and weed rash, biogas residual solids and sludge, normal compost, only biogas residual solids, only surface soil (every treatments contain 1:1 ratio surface soil). Every treatments was conduct under same environmental condition and same period of times. According to the statistical analysis treatment 2 and treatment 4 were taken as best treatments.

This was carried out with average diameter of the tubers 16.813 ± 0.489 of treatment 4 and 16.453 ± 0.280 of treatment 2, average height of the plants 34.947 ± 0.480 of treatment 4 and 32.387 ± 0.304 of treatment 2, average number of leaves 6.933 ± 0.11 of treatment 4 and 6.267 ± 0.64 of treatment 2, average leaf area 42.060 ± 0.50 of treatment 4 and 40.693 ± 0.73 of treatment 2

Key words: Biogas Residual Solids, Leaf are index, Sludge, Gliricidia, Weed rash, Poultry litter