

Preliminary investigations on quantity and proximate quality of maggots produced from four different sources of livestock wastes

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ABSTRACT:

Maggot, housefly larva was grown on four substrates namely: poultry (layer) droppings, cattle dung, pig dung, and whole cattle blood. Poultry droppings produced maggots with the highest wet and dry weight, while the lowest weights were recorded for pig dung. The values ranged between 58.73g and 8.18g for wet weight and 12.79g and 2.97g for dry weight respectively. Proximate compositions of the maggots were determined using standard methods. Results indicate that the crude protein content of the maggots ranged from 55.4% in maggots grown on pig dung to 57.42% in maggots grown on cattle blood. The crude fibre contents ranged between 0.32% and 0.21%. Maggots produced from pig dung and cattle blood recorded the highest ash content and the values were 11.09% and 11.20% respectively. Moisture content was highest (10.14%) for maggots produced from cattle dung. Fat content of the maggots produced from the different livestock wastes ranged between 21.06% and 22.66%. Significant differences ($p < 0.05$) in the proximate composition of the maggots were only observed in the crude fiber, ash and moisture contents. The results from this study showed that the substrates used can produce substantial quantities of maggots with varying degrees of success.

Keywords:

maggots, proximate quality, livestock wastes