

**The Use of Maggots *Black Soldier Fly (Hermetia Illuminens)* as an
Alternative to Processing Organic Waste in Canteens
Poltekkes Kemenkes Yogyakarta
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ABSTRACT

Background :The increase in organic waste in the Yogyakarta Ministry of Health Polytechnic Canteen causes environmental pollution which can cause various problems such as the appearance of odors, and can create various breeding places for disease factors, such as the arrival of green flies, mice and cockroaches. However, not all types of flies are negative, one of which is the BSF fly type used to reduce organic waste.

Method :The organic waste reduction research was: 200 grams, 300 grams, 400 grams, and 500 grams were given to each 100 gram BSF maggot, and the reduction was checked once per day for 10 days.

Results :The results of the research showed that the greatest reduction occurred in the weight of 500 grams of residual organic waste, reduced by 498 grams. The ANOVA test results were $0.03 < 0.05$ so there was a significant relationship between differences in the weight of organic waste.

Conclusion: The most effective weight can be seen descriptively in the weight of the 500 gram organic waste variant, which is reduced by 498 grams more than the other variants.

Keywords : Weight of Organic Waste, Maggot *Black Soldier Fly*, Reduction.

**Pemanfaatan Maggot *Black Soldier Fly (Hermetia Illucens)* sebagai
Alternatif untuk Mengolah Sampah Organik di Kantin
Poltekkes Kemenkes Yogyakarta
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INTISARI

Latar Belakang : Peningkatan sampah organik di Kantin Poltekkes Kemenkes Yogyakarta menyebabkan pencemaran lingkungan dapat menimbulkan berbagai masalah seperti timbulnya bau, serta dapat menjadikan berbagai tempat perkembangbiakan faktor penyakit, seperti datangnya lalat hijau, tikus, kecoa. Namun tidak semua jenis lalat bersifat negatif, salah satunya adalah lalat dengan jenis lalat BSF dimanfaatkan untuk mereduksi sampah organik.

Metode : Penelitian reduksi sampah organik adalah : 200 gram, 300 gram, 400 gram, dan 500 gram diberikan masing-masing maggot BSF 100 gram, dan dilakukan pengecekan yang tereduksi 1x perhari selama 10 hari.

Hasil : Hasil penelitian menunjukkan bahwa reduksi terbanyak terjadi pada berat sisa sampah organik 500 gram tereduksi 498 gram. Hasil uji Anova $0.03 < 0.05$ sehingga terdapat hubungan yang signifikan antara perbedaan berat sampah organik.

Simpulan : Berat paling efektif dapat dilihat secara diskriptif pada berat varian sampah organik 500 gram yaitu tereduksi sebesar 498 gram lebih banyak dari varian yang lainnya.

Kata Kunci : Berat Sampah Organik, Maggot *Black Soldier Fly*, Reduksi.