

INTISARI

PERBANDINGAN PERTUMBUHAN LARVA LALAT PADA BANGKAI TIKUS DI HUTAN DAN DI DALAM RUMAH

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Latar Belakang : Kematian adalah salah satu hal yang pasti akan terjadi pada setiap makhluk hidup. Dalam identifikasi kasus kematian jenazah baik yang wajar maupun yang tidak wajar, kita perlu menentukan *Post Mortem Interval* (PMI). Penentuan PMI dengan bantuan serangga telah dikembangkan di berbagai negara. Saat ini di Indonesia, acuan entomologis masih sedikit dan di provinsi Daerah Istimewa Yogyakarta (DIY) masih belum pernah dilakukan.

Tujuan : Membandingkan laju pembusukan, genus, urutan kedatangan, dan pertumbuhan larva lalat pada bangkai tikus di hutan dan di dalam rumah.

Metode : Studi kohort prospektif ini mengamati bangkai tikus di hutan dan di dalam rumah. Pengambilan larva dilakukan tiap hari untuk membandingkan genus, urutan kedatangan, dan pertumbuhan larva lalat pada bangkai tikus antar perlakuan.

Hasil : Laju pembusukan di hutan lebih lambat di awal namun lebih cepat di akhir daripada di dalam rumah. Pada perlakuan di hutan ditemukan 3 genus larva lalat sedangkan pada perlakuan di dalam rumah ditemukan 4 genus larva lalat. Urutan kedatangan lalat pada bangkai tikus di hutan adalah *Sarcophaga sp.*, *Calliphora sp.*, dan *Chrysomya sp.*. Urutan kedatangan lalat pada bangkai tikus di dalam rumah adalah *Sarcophaga sp.*, *Calliphora sp.*, *Phormia sp.*, dan *Chrysomya sp.*. Terdapat perbedaan bermakna secara statistik rerata panjang larva *Chrysomya sp.* pada hari ketiga dan larva *Sarcophaga sp.* pada hari keempat. Terdapat perbedaan bermakna secara statistik rerata panjang dan massa larva *Calliphora sp.* pada hari ketiga hingga hari kelima.

Kesimpulan : Terdapat perbedaan laju pembusukan, genus, urutan kedatangan, dan pertumbuhan larva lalat antara di hutan dan di dalam rumah.

Kata kunci : PMI, pertumbuhan larva lalat, laju pembusukan, hutan, rumah

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ABSTRACT

COMPARISON OF GROWTH RATE OF FLY LARVAE ON DEAD RATS IN FOREST AND IN HOUSE

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Background : Death is one of the things that will certainly happen to all living things. In identifying both natural and unnatural death, we need to estimate *Post Mortem Interval* (PMI). PMI estimation using insects has been developed in various countries. In Indonesia, there are only few entomology references and it has never been done in the Daerah Istimewa Yogyakarta (DIY) province.

Objective: To compare decomposition rate, genus, sequence of arrival, and growth rate of fly larvae on dead rats in the forest and in the house.

Method : This cohort prospective study observes dead rats in the forest and in the house. Collection of larva was done every day to compare the genus, sequence of arrival, and growth rate of the fly larvae on dead rats between groups.

Result : The decomposition rate in the forest was slower in early period but faster in the later period than in the house. In the forest group, there were 3 genera of fly larvae whereas in house group, there were 4 genera of fly larvae. The sequence of arrival on dead rats in the forest was *Sarcophaga sp.*, *Calliphora sp.*, and *Chrysomya sp.*. The sequence of arrival of fly on dead rats in the house was *Sarcophaga sp.*, *Calliphora sp.*, *Phormia sp.*, and *Chrysomya sp.*. There were statistically significant mean differences on *Chrysomya sp.*'s length on third day and on *Sarcophaga sp.*'s length on fourth day. There were statistically significant mean differences on *Calliphora sp.*'s length and weight on third day until fifth day.

Conclusion : There were differences on decomposition rate, genus, arrival sequence, and growth rate of fly larvae in the forest and in the house.

Keywords : PMI, decomposition rate, growth rate of fly larva, forest, house

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