

## INTISARI

**Latar Belakang :** Pada keadaan mayat dengan luka terbuka, proses pembusukan lebih mudah terjadi. Salah satu alternatif yang dapat digunakan pada pemeriksaan mayat yang telah membusuk yaitu memeriksa organisme yang berkembang biak pada mayat. Larva lalat dapat digunakan memperkirakan waktu kematian.

**Tujuan :** Melihat tahapan pembusukan, membandingkan genus, urutan kedatangan, pertumbuhan larva lalat pada bangkai tikus kontrol dan trauma luka terbuka.

**Metode :** Penelitian ini menggunakan desain eksperimental kohort dengan memberikan perlakuan trauma luka terbuka pada tikus.

**Hasil :** Pada bangkai tikus kontrol, tahap *initial decay* (24 jam), tahap *putrefaction* (48-72 jam), tahap *active decay* (72-96 jam), tahap *post decay* (120 jam), tahap *skeletonization* (144 jam). Pada bangkai tikus dengan trauma luka terbuka, tahap *initial decay* (24 jam), tahap *putrefaction* (48 jam), tahap *active decay* (48-72 jam), tahap *post decay* (72-96 jam), tahap *skeletonization* (120 jam). Genus larva lalat pada bangkai tikus kontrol dan trauma luka terbuka, yaitu *Calliphora sp.*, *Chrysomya sp.*, dan *Sarcophaga sp.* Urutan kedatangan lalat pada bangkai tikus kontrol dan trauma luka terbuka adalah *Calliphora sp.*, *Chrysomya sp.*, *Sarcophaga sp.* Terdapat perbedaan bermakna secara statistik rerata panjang dan berat larva *Chrysomya sp.* hari ketiga, berat larva *Calliphora sp.*

**Kesimpulan:** Tahap *active decay*, *post-decay*, *skletonization* pada bangkai tikus dengan trauma luka terbuka lebih cepat 24 jam dibandingkan dengan bangkai tikus kontrol. Terdapat perbedaan panjang dan, berat larva *Chrysomya sp.*, berat larva *Calliphora sp.* hari ketiga antara perlakuan trauma luka terbuka dan kontrol.

**Kata Kunci:** Larva Lalat, Luka Terbuka, *Post Mortem Interval*

## Abstract

**Background :** In the situation of the corpse with open wounds, stage of decay occur more easily. One of the alternative that can be used in the examination on the corpse had decayed, examine the organisms that breed on the corpse. Fly larvae can be used to estimate the time of death (postmortem interval).

**Purpose :** To compare the stages of decay, genus, sequence of arrival, and growth rate of the fly larvae on rat's corpse exposed to open wound and control.

**Method :** This study is using experimental cohort design with exposing open wound on rat's.

**Result :** In rat's corpses control, the initial decay stage (24 hours), putrefaction stage (48-72 hours), stage of active decay (72-96 hours), post decay stage (120 hours), skeletonization stage (144 hours). In rat's with traumatic an open wound, initial decay stage (24 hours), putrefaction stage (48 hours), active decay stage (48-72 hours), post decay stage (72-96 hours), skeletonization stage (120 hours). The genus of fly larvae found on the control and on the open wound exposed rat's corpse were *Calliphora sp.*, *Chrysomya sp.*, *Sarcophaga sp.* The sequence of arrival of fly on rat's corpses control and open wound is *Calliphora sp.*, *Chrysomya sp.*, *Sarcophaga sp.* There are statistically significant mean difference between control and open wound on *Chrysomya sp.* larvae's length and weight growth, *Calliphora sp.* larvae's weight growth on the third day.

**Conclusion:** Active decay, post-decay, and skeletonization stage on traumatic an open wound exposed rat's corpse 24 hours faster than the control. There are no differences in larvae genus and arrival sequence on traumatic an open wound exposed rat's corpse and control. There are difference in *Chrysomya sp.* larvae's length and weight growth, *Calliphora sp.* larvae's weight growth on third day.

**Keyword :** Fly Larvae, Open Wound, Post Mortem Interval