



Oriental Blow Fly

Michael W. DuPonte¹ and Linda Burnham Larish²

¹CTAHR Department of Human Nutrition, Food and Animal Sciences, ²Hawaii Department of Health

***Chrysomya megacephala* Fabricius**

Origin

The oriental blow fly was first collected in Kona, Hawaii, by Grimshaw in 1892 and is now found throughout the Hawaiian islands up to about 4000 feet elevation.

Public health concern

The oriental blow fly carries intestinal pathogens and will invade diseased tissue.

It causes public complaints when large numbers emerge from animal carcasses or garbage.

Larval age is used in forensic entomology to determine the postmortem interval.

Hosts

Feed on human and livestock excreta, fish, meats, organic garbage, anything sweet, and dead carcasses

Livestock concern

Can become a nuisance at poultry facilities due to dead birds and broken eggs.

Hog operations generate blow flies from wet garbage.

Description

Large fly, over $\frac{3}{8}$ inches long.

Adults are bright metallic green with black margins on the second and third abdominal segments.

Adult flies have large red eyes, almost touching in the front of the face on the males.

The face below the eyes is yellow to orange.

Life cycle

Growth stages: egg, larva, pupa, and adult.

The period from egg to adult takes only 8–9 days.

A female fly will lay 150–300 eggs in each batch.

The larval and pupal stages each lasts about 4 days.



Control

Poultry operations need to incinerate or compost dead birds and dispose of broken eggs before flies breed.

Hog farms need to cook garbage and dispose of raw slop.

Homeowners and restaurants should remove garbage at least twice a week and keep the area clean

Insecticidal sprays can be used to control adults on surfaces where they land

References

Hardy, D. Elmo. 1981. Insects of Hawaii, vol. 14 Diptera: Cyclophaga IV. Univ. Hawaii Press, Honolulu. pp. 356–359.

Pereira, Marcelo de Campos. The Veterinary Parasitology Images Gallery. University of Sao Paulo, Sao Paulo, Brasil. Photo on this page ©MCP; used with permission.

Wells, J.D., and H. Kurahashi. 1994. *Chrysomya megacephala* (Fabricius) (Diptera: Calliphoridae) development: Rate, variation and the implications for forensic entomology. Japan. J. Sanit. Zool. 45(4): 303–309.

Williams, R.E. 2003. Control of poultry pests. <www.entm.purdue.edu/entomology/ext/targets/e-series/EseriesPDF/E-3.pdf>.

Vector control manual. 1991. Hawaii Department of Health.