

Pest Profile



Photo credit: By Jim Kalisch, University of Nebraska-Lincoln

Common Name: Blue Bottle Fly, Bottlebee

Scientific Name: *Calliphora vomitoria*

Order and Family: Diptera: Calliphoridae

Size and Appearance: Adult *Calliphora vomitoria* are about 10-14 mm in length with a metallic blue abdomen while the head and the thorax are a dull gray in color. The flies feature red eyes, sponging mouthparts, and bristle-like hairs covering the body. Maggots are white, 10-16 mm in length, leg and eyeless, and have hooks at the head region.

	Length (mm)	Appearance
Egg	1.2 mm in length	White, round, eggs are laid on larval food source. 2,373 can be laid by one female.
Larva/Nymph	10-16 mm in length depending on instar	White, cylindrical, hooks on head, legless, eyeless, 3 instars.
Adult	10-14 mm long	Females are larger than males. Metallic blue abdomens while thorax and head are dull gray in color. Red eyes, sponging mouthparts, and bristle-like hairs covering body.
Pupa (if applicable)	5-18 mm long	Pupal cased formed from the last larval skin and is yellowish-brown in color.

Type of feeder (Chewing, sucking, etc.): Sponging

Host /s: *C. vomitoria* feed on animal carcasses, manure, decaying vegetation, and garbage. Generalist feeders.

Description of Damage (larvae and adults): Blue Bottle flies are nuisance pests that are attracted to homes due to warmer temperatures, dog manure, and dead rodents. Due to feeding habits, likely they carry and transmit pathogens of E. coli, cholera, plague, tuberculosis, and tularemia. Their nickname, "bottlebee," comes from the fact that they pollinate strongly smelling plants like goldenrod, paw paw, and skunk cabbage.

References:

Smith, E.H. and Whitman, R.C. (2007). Flies (non-biting)- Blow Flies. In *NPMA Field Guide of Structural Pests*. (6.1.1). National Pest Management Association International.

Triplehorn, C., Johnson, N., Borror and Delongs Introduction to the Study of Insects. Brooks/Cole, 7th Ed. 2005. Pp. 672 & 729-730.