

# DISTRIBUTION AND ABUNDANCE OF STOMOXYINI FLIES (DIPTERA: MUSCIDAE) IN THAILAND

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**Abstract.** Stomoxyni flies (Diptera: Muscidae) include species of parasitic flies of medical and veterinary importance. The adult flies feed on the blood of mammals and may transmit several parasites and pathogens. We conducted an entomological survey of Stomoxyni flies from different sites in Thailand. Stomoxyni flies were collected at four major types of sites: zoos, livestock farms, wildlife conservation areas and a national park using vavoua traps between November 2010 and April 2011. A total of 3,314 Stomoxyni flies belonging to the genera *Stomoxys*, *Haematobosca*, *Haematostoma* and *Haematobia* were collected. Eight species were identified: *S. calcitrans* (46.6%), *S. uruma* (26.8%), *S. pulla* (4.3%), *S. indicus* (0.7%), *S. sitiens* (0.1%), *H. sanguinolenta* (11.2 %), *H. austeni* (0.5%) and *H. irritans exigua* (9.8%). The diversity of Stomoxyni flies in the livestock farms was higher than the other sites. Altitude correlated with the number of flies. This study provides information that may be useful for Stomoxyni flies control.

**Keywords:** Stomoxyni flies, Muscidae, *Stomoxys*, *Haematobosca*, *Haematostoma*, *Haematobia*

## INTRODUCTION

Stomoxyni flies are classified into the subfamily Muscinae. This subfamily is part of the family Muscidae which

is comprised of 4,500 described species divided into 180 genera (De Carvalho *et al*, 2005). Stomoxyni flies consist of 10 genera and 50 species (Crosskey, 1993). Adult Stomoxyni flies are obligate blood feeders and can easily be recognized by their conspicuous proboscis adapted for biting and sucking blood (Zumpt, 1973). Stomoxyni flies are associated with livestock, wildlife and humans (Zumpt, 1973). Of these flies, *Stomoxys calcitrans* and *Haematobia irritans* are major pests for livestock and cause a huge economic

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