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## **Responses of Tabanidae and Muscidae (Diptera) to fresh and fermented host urines**

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### **Abstract**

Using 3 X 3 and 5 X 5 randomized Latin square experiments, volatiles from fresh and aged urine of six species of farm animals were tested for their attractiveness to tabanids (Diptera: Tabanidae) and muscids (Diptera: Muscidae) in Khartoum State, between May and July 2005. Regardless of source, volatiles from fresh and aged urine evaporated at similar rates ranging between 300-1733.8 mg/h depending on the time of the day. 24 h Nzi trap catches suggested that tabanids were not significantly concerned with volatiles from fresh or aged urine of female sheep, female goat, she-camel, ox or male horse. Aged male donkey urine doubled the catch of the horsefly, *Atylotus agrestis*. In contrast, the smell of fresh male goat urine depressed significantly ( $P < 0.01$ ) the catch of *A. agrestis*, *Tabanus sufis*, pooled tabanid as well as pooled muscids by up to five times. There were no significant differences between catches in traps baited with fresh or aged male goat urine. These results are discussed with regards to host location behaviour of insects and improvement of baits to control disease vectors of humans and livestock.