CHEMICAL ATTRACTANTS OF HORSE FLIES (DIPTERA: TABANIDAE). R. G. Holmberg, Faculty of Science, Athabasca University, Athabasca, Alberta, T0G 2R0; and J. F. Sutcliffe, Department of Biology, Trent University, Peterborough, Ontario.

Manitoba Fly Traps were used to assess the attractiveness of carbon dioxide and 1-octen-3-ol to tabanids (predominantly *Hybomitra epistates* and *H. illota*) near Athabasca, Alberta. The attractiveness of both chemicals was confirmed. Carbon dioxide was tested at four release rates: 500, 1000, 3000 and 4000 mL per minute. Statistical differences between traps with and without carbon dioxide occurred only for release rates of 3000 and 4000 mL per minute. A release rate of 500 mL per minute of carbon dioxide was equally attractive to tabanids as a release rate of 0.02 mL per hour of 1-octen-3-ol. Combining these two chemicals gave an additive effect. Negative results were obtained for acetone (released at 0.30 mL per hour), acetophenone (0.05 mL), and a mixture of 3- and 4-ethyl phenol (0.01 mL).

November 1993 ISSN 0071-0709

PROCEEDINGS OF THE 40TH ANNUAL MEETING OF THE

Entomological Society of Alberta

Jasper, Alberta 15-17 October 1992 Volume 40: 6-7.