Dedication

I would like to express my gratitude to my late supervisor Prof Mohamed Musa Mohamed-Ahmed, I dedicate this work to the spirit and any one gave me assistance

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Firstly, praise to Allah for giving me the health and wellness to complete this work.

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Abstract

Response of tabanids to unbaited and baited traps was studied during July 2012 to April 2014. Surveys were covered the main vegetations habitats in Ed Damazein, Er Roseries and Umm Banein Localities, using Nzi, Biconical and Vavoua traps. Ed Damazein Locality tabanids comprise of *Atylotus agrestis* (93.28%), *Tabanus taeniola* (6.06%), *T. par* (0.13%), *T. sufis* (0.07%) *T. biguttatus* (0.07%), *Philoliche magretti* (0.26%) and *Haematopota* species (0.13%); tabanids of Er Roseries Locality including *A. agrestis* (83.57%), *A. fuscipes* (6.50%), *T. taeniola* (2.56%), *T. biguttatus* (0.46%), *T. sufis* (0.34%), *Ph. magretti* (6.31%) and *Haematopota* species (0.26%); while Umm Bbanein Locality tabanids involving *A. agrestis* (80.31%), *T. sufis* (15.69%) and *T. taeniola* (4.13%). The predominant *A. agrestis* together with *T. taeniola* were encountered with different proportion throughout the seasons. The *A. fuscipes*, *T. biguttatus* and *Ph. magretti* were caught during the rainy and cool-dry seasons; *T. sufis* was trapped in both the cool and hot-dry seasons; while *T. par* and *Haematopota* species were only captured in the rainy and cool-dry season, respectively. The majority of the horse flies are abundant during the rainy season. The *A. agrestis* showed bimodal curve of flight; the smaller peak signaling the start of the rain and the higher one at the end of the rainy season and the beginning of the cool-dry season (October- November) in addition to the other species. In general in the Blue Nile region the Nzi trap was always superior to the Biconicals and Vavoua traps trapped significant ($p < 0.5$) more flies including *Ph. magretti*; nevertheless the later traps caught more *T. biguttatus* than the Nzi one. The modified Nzi traps caught more tabanids, yet they were not significantly better than the original Nzi trap. Neither the modified nor the fresh and fermented urine-baited Nzi traps caught significantly more tabanids than did unbaited orginal Nzi trap.

المستخلص

أجريت الدراسة لاستجابة ذبابة الخيل للجواذب الطبيعية في الفترة من يوليو 2012 الي ابريل 2014. اجرى المسح فى معظم الغطاء النباتى بمحليات الدمازين والروصيرص وام بنين باستخدام انواع المصائد (Nzi) و(Biconical) و (Vavoua). وجدت الانواع الاتية من الذباب في محلية الدمازين *Atylotus agrestis* (93.28%), *Tabanus taeniola* (6.06%), *T. par* (0.13%), *T. sufis* (0.07%) *T. biguttatus* (0.07%), *Philoliche magretti* (0.26%) and *Haematopota* species (0.13%); محلية الروصيرص شملت *A. agrestis* (83.57%), *A. fuscipes* (6.50%), *T. taeniola* (2.56%), *T. biguttatus* (0.46%), *T. sufis* (0.34%), *Ph. magretti* (6.31%) *Haematopota* species (0.26%), بمحلية ام بنين *A. agrestis* (80.31%), *T. sufis* (15.69%) *T. taeniola* (4.13%). ذباب *A. agrestis, T. taeniola* فقط متواجدة خلال الثلاث فصول بنسب متفاوتة، *A. fuscipes, T. biguttatus* و *Ph. magretti* مسكت خلال الفصل الممطر والفصل البارد الجاف, تواجدت *T. sufis* خلال الفصل البارد والحار الجاف، بينما وجدت *T. par* و *Haematopota* species على التوالى فى الفصل الممط و البارد الجاف. نمط الوفرة للذباب باستعمال مصيدة (Nzi) كانت في الفصل الممطر. نجد ان *A. agrestis* النوع السائد لها قمتان للطيران الاصغر في بداية الفصل الممطر و الاعلي في نهاية الفصل الممطر وبداية الفصل البارد الجاف وفى نفس الفترة نجد ان جميع الانواع الاخرى لها قمة نشاط واحدة. سجلت الدراسة بان مصيدة (Nzi) الاعلى فعالية معنويا ضد انواع ذباب الخيل متضمنا *Ph. magretti* من مصيدتى (Biconical) و (Vavoua) الاعلى فعالية ضد نوع *T. biguttatus* . مصائد (Nzi) المعدلة اكثر فعالية من المصيدة الاصل بدون فروق معنوية. اضافة مواد جاذبة شملت بول جديد ومتخمر من حيوانات المزرعة لم تؤثر معنوبا على كفاءة مصيدة (Nzi) الاصل.

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