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**Purpose:** To demonstrate the effectiveness of two ear tags (Python® Magnum & Warrior™) for horn fly suppression on beef cattle.

**Materials and Methods:** Three Brangus-Angus herds located at the Stiles Farm in Williamson County Texas were used in this study. Each treated herd was tagged on 23 May 2003. The following treatments were used, 1) one herd containing 28 head had a Python Magnum tag inserted in one ear of each animal, 2) a herd containing 40 head had a Warrior tag inserted in both ears of each animal, 3) a herd containing 14 head were not treated and served as the control. These herds were separated by a minimum of two miles. Python Magnum is a sustained-release, plastic ear tag containing a synergized formulation of the pyrethroid, zeta-cypermethrin. Warrior is a 40% organophosphate ear tag, which releases a patented, synergized formulation of 30% diazinon and 10% chlorpyrifos. Horn fly counts were made weekly for 10 cows randomly selected from each treatment from 20 June until 5 September 2003. Data were summarized and statistically analyzed.

**Results & Discussion:** Data from this study are presented in Figure 1. From 20 June until 1 August horn fly numbers for the control herd were above the economic threshold (200 flies/cow). Each ear tag treatment successfully suppressed horn fly numbers below the economic threshold during this period. Data from this study indicate that both the Python Magnum and Warrior tags worked extremely well in reducing horn fly numbers on cattle. However, to gain the full benefit of using insecticide ear tags, cattle should be tagged when horn fly numbers breach 100 flies/cow, which would be in early April or May in central Texas.

Although significant control ( $P \leq 0.05$ ) with the Python Magnum and Warrior ear tags was recorded, concerns for pyrethroid resistance should still be considered an issue. In order to avoid resistance development, producers should alternate tags containing compounds from different insecticide classes each year, such as alternating between the Python Magnum (pyrethroid) and Warrior (organophosphate) tags from one year to the next.

Williamson Co: Horn Fly Study 2003

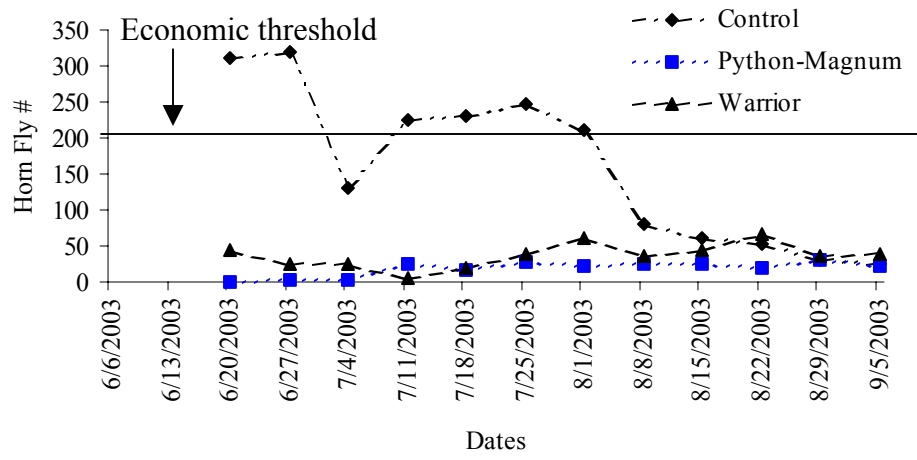


Figure 1. Horn fly numbers per cow for each treatment from June until September.