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L: Late breaking abstracts

L015

#### Monitoring Field Susceptibility to Imidacloprid in the Cat Flea: An Update on Progress from a Fourteen Year Initiative

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2015 marks fourteen years since the establishment of an international Flea Susceptibility Monitoring (FSM) initiative by Bayer Animal Health, the first of its kind in the companion animal parasiticide arena. The program incorporates collaborating laboratories in the USA, Europe and Australia, utilising a validated larval development inhibition assay to track the susceptibility of cat flea isolates, field collected from veterinary practices, to imidacloprid. Since 2002, an established diagnostic dose threshold of 3ppm has been employed to identify isolates that require further investigation. In the thirteen year period to the end of 2014, a total of 2838 cat flea isolates were received across all participating sites; 2042 of these submissions were suitable for placement into the bioassay, resulting in a total of 1683 valid assays over this period. Adult flea emergence 5% or greater at 3ppm imidacloprid was observed in 56 of these valid assays (3.3%). For these isolates that reached the threshold for further investigation, reconduct of the assay using either a repeat challenge dose of 3ppm of imidacloprid or a dose response probit analysis confirmed their susceptibility to imidacloprid. These findings affirm retained susceptibility of cat flea isolates to imidacloprid after almost twenty years of its worldwide use as a companion animal pulicide.

L016

#### Isolation of Hc-fau and its role in regulating *Haemonchus contortus* diapausing L4

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The gastrointestinal nematode *Haemonchus contortus* is a major blood feeding pathogen of sheep and goats. Diapause is a strategy to adapt this nematode to hostile environmental conditions. Therefore, the research on diapause is essential for preventing and controlling the