



# WAAVP

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the Advancement of Veterinary Parasitology

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Dedicated to the legacy of Professor Arlie C. Todd

*Sifting and Winnowing the Evidence in Veterinary Parasitology*



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# Abstract Book

*Joint meeting with the 64<sup>th</sup> American Association of Veterinary Parasitologists  
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shift to host-like temperature. In cohorts of iL3 that penetrated mouse skin, 51.7% resumed feeding, as reflected in fluorescein ingestion, while only 9.6% of non-penetrating controls did so. This iL3 activation via skin migration was further investigated using LC/MS to determine whether there was a correlation with DA production, however preliminary results did not indicate a peak in synthesis. Considering the possibility that DA levels required for resumption of feeding are below the level of LC/MS detection, we are now assessing the effect of ketoconazole, a CYP inhibitor, to ascertain the requirement of CYP function for DA biosynthesis in penetration-mediated developmental activation of *S. stercoralis* iL3. Moreover, genetic analysis is being performed on skin-penetrated larvae to identify transcripts associated with the dauer recovery pathway.

#### PS02.22 Viability of *Haemonchus Placei* Parasitism in Experimentally Infected Young Goats

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The present study aimed to evaluate the viability of *Haemonchus placei* parasitism in experimentally infected goats, since there are no such studies regarding this ruminant species. For that, 14 newborn male Saanen kids were placed in one of the four experimental groups: GI - infected with 5000 *H. placei* L3 (n = 4); GII - infected with 5000 *H. placei* L3 (n = 4); GIII - infected with 2500 *H. contortus* L3 + 2500 *H. placei* L3 (n = 4), and GIV - control, inoculated with distilled water (n = 2). Each kid received, orally, the infective dose in a single inoculum. Based on daily fecal egg counts (FEC), the average pre-patent period was determined as 24 days

for *H. contortus*, and 31 days for *H. placei*. 42 days after the artificial infections, the 14 kids were slaughtered, and the *Haemonchus* sp. parasites were harvested, in totum, from the abomasum. The experimental groups GI, GII, and GIII had, respectively, an average of 25.5, 619.5, and 724.75 (120 *H. placei*, and 604.75 *H. contortus*) adult specimens, and no immature forms. Under the conditions of this study, the viability of goat infection by *H. placei* was confirmed, although, with low susceptibility. Nevertheless, the parasitism of this helminth species was more intense when associated with *H. contortus*. This fact indicates that in common grazing between cattle and young goats, when the latter end up ingesting both *Haemonchus* species, especially in a mixed infection, *H. placei* may also parasitize them.

#### PS02.23 Ovicidal Effect of Citronellal and Citronellol in *Haemonchus Contortus* In Vitro Egg Hatch Test

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Gastrointestinal nematodes are one of the main causes of decrease in the productivity of small ruminants and are commonly treated with anthelmintics. However, the indiscriminate use of these drugs led to the reduction of efficacy through the selection of resistant parasites, so it is essential to preserve the efficiency of the current anthelmintics, exploring new control alternatives such as the use of phytochemical compounds as essential oils. The objective of the present study was to evaluate the activity of citronellal and citronellol on *Haemonchus contortus* resistant strain through the egg hatchability test and to determine lethal concentrations CL50 and CL90 using increasing doses (0.003 mg / mL, 0.007 mg / mL, 0.010 mg / mL, 0.030 mg / mL, 0.060 mg / mL, 0.120 mg / mL, 0.250 mg