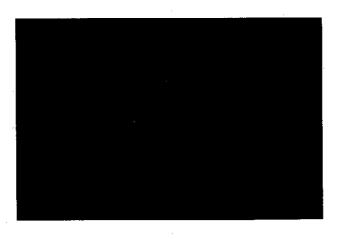


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## on donkeys using alphacypermethrin pour-on. Treatment of natural infestation of the chewing louse (Werneckiella equi)

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apeutics, such as antiparasitic compounds, are often administered cide effective against a wide range of pests of many crops and is of the skin and louse infestation tends to be seen in unkempt anioccurring infestation of W. equi on donkeys. was to evaluate the field efficacy of ACYP pour-on against naturally cations (Grosenbaugh et al, 2011, Equine Vet Educ, 23: 523-530). and cattle, because very few drugs have donkey-specific label indito donkeys based on dosage and intervals recommended for horses used for the control of several veterinary insects, including lice. In keys. Alphacypermethrin (ACYP) is a synthetic pyrethroid insecti-590-591). W. equi has been found on horses worldwide, however, ness and loss of body condition (Wright, 1999, Can Vet J 40: mals and often leads to hyperkeratosis, alopecia, anorexia, restlesslouse, the chewing louse, Werneckiella equi and the sucking louse AIM: Donkeys and horses may be infested with two species of keys of most insecticides. Therefore, the aim of the present study The literature lacks information on the use and the efficacy for don-Italy, ACYP is marketed for cattle as a pour-on formulation. Therthere is a paucity of literature on the presence of W. equi on don-Haematopinus asini. W. equi feeds on the most superficial layers

of ectoparasiticides in ruminants (Holdsworth PA et al, 2006, Vet donkey farm, consisted of 40 donkeys, located in Southern Italy. MATERIALS AND METHODS: The trial was performed in a each count, the hair at the site (about 10 x 20 cm area) was parted shoulders/withers, foreleg, back, hindleg and tailhead/rump. For ual louse count at seven louse predilection sites: head, neck/mane, were used. On the day before treatment, louse counts were perplied topically along the midline of the back from the withers to ufacturer's recommended cattle dose rate. The formulation was ap-ACYP pour-on (Renegade 1.5%, Pfizer Animal Health) at the man-10 cm for live (motile) lice. On day 0 the study animals received with a comb and, the part inspected for a length of approximately formed on 13 naturally infested donkeys by recording the individfor horses (Lowden S et al, 2007, Vet Parasitol, 148: 295-300) Parasitol, 136: 45-54) and the louse counting procedures described lice on equids, the WAAVP guidelines used to evaluate the efficacy In the absence of standardized guidelines for the quantification of

the tailhead. There was no untreated control group for animal welfare reasons. Louse counts were performed weekly (day – 1, 7, 14, 21, 28, 35, 42, 49 and 56) by summing all predilection site counts. The efficacy (%) of ACYP was determined in terms of percent louse reduction using Abbott's formula as proposed by WAAVP guidelines: Efficacy = 100 x [(C-T)/C], where T = louse count after the treatment and C = louse count before the treatment. The Body Condition Score (BCS) of each animal was determined prior to treatment (day -1) and at the end of study (day 56) using the BCS chart (The Donkey Sanctuary, 2003). Significant differences between sets of data were carried out using ANOVA.

RESULTS: In total 1,140 W. equi were recorded from the inspection sites on 13 study donkeys on day -1 (mean 87.7±72.9). On the majority of the animals (76.9%) more than 40 lice were found prior to treatment. The infestations were variable between the study donkeys with counts ranging from 25 to 240 lice. More than the half of the louse burden was found in the area along the neck/mane (21.7%) and shoulders/withers (29.4%). The back, foreleg, head and hindleg sites contained 16.7, 14.0, 10.7 and 7.5% of the counted lice, respectively. No lice were found on tailhead/rump. For all post-treatment days of inspection, no lice were counted at the inspection sites or during whole body inspections; resulting in an efficacy of 100% for days 7-56. No abnormal animal health conditions related to treatment were observed during the study. The BCS values were in the normal range for donkeys and did not show a significant (P > 0.05) difference before and after treatment.

**CONCLUSIONS:** This field trial demonstrates that ACYP applied pour-on at the manufacturer's recommended cattle dose rate was completely effective, safe and user-friendly for the treatment of *W. equi* on donkeys.