

CITRUS PULP FOR PARASITE CONTROL FOR SHEEP ON PASTURE ¹

POLPA CÍTRICA PARA CONTROLE DE PARASITAS NO PASTO

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Citrus pulp, wet and dehydrated, has importance as natural anthelmintic, by having in its composition essential oils with large amounts of terpenes, which are secondary metabolites that can cause interference in biochemical and physiological parasites functions. Packed cell volume (PCV) is a tool for indirect diagnosis of infections caused by *Haemonchus contortus*, since this parasite is a haematophagous nematode that causes severe anemia in animals. The aim of this study was to evaluate the results of PCV and fecal egg count per gram of feces (EPG) in sheep naturally infected fed with dried citrus pulp or wet citrus pulp silage. The experiment was carried out at Instituto de Zootecnia, from June to August/2012, with 45 Santa Ines ewe lambs divided into three groups (15 animals / treatment), according to weight and initial EPG. The ewes lambs from each treatment were kept at different paddocks of *Panicum maximum* cv. Aruana grass and supplemented with corn silage and with 1% (DM basis) of corn grain (T1 - control) or dried citrus pulp (T2) or wet citrus pulp silage (T3). Blood and feces samples were collected for packed cell volume determination by centrifugation and feces by examination in McMaster chambers. Analysis of variance was performed after data transformations (log (X+10)) and means compared by the SNK test at 5% probability (SAS). The means of group 1, 2 and 3 did not show statistic difference (P > 0.05) on PCV : 25.92 ± 3.94%, 26.95 ± 04.01% and 27.47 ± 5.32%, respectively, however, the value 25.92% PCV on the T1 is lower than the reference value for sheep. Regarding the EPG, the ewe lambs of T1 had the highest mean (P < 0.05) for *trichostrongylides* (2051 ± 3747) compared with the two others treatments (T2: 1485 ± 2031) and T3 (2151 ± 4509) that were similar between them. In contrast, the mean for *Strongyloides* spp. counts were higher in T 3 (295 ± 664 - P < 0.05), whereas T 1 (45.7 ± 104.8) were similar to T 2 (72.2 ± 132.6). The means for *Eimeria* spp. and *Moniezia* spp. were not different between treatments, with overall mean of 941.9 ± 29.9 and 1492.5 ± 184, respectively. Dried citrus pulp and wet citrus pulp silage reduce *trichostrongylides* egg counts, but are not effective on control of *Eimeria* spp. and *Moniezia* spp.

Key words: citric pulp, *Haemonchus contortus*, ewe lamb, worm.