THE INFLUENCE OF LAYING HEN (*Gallus gallus domesticus* L., 1758) (PHASIANIDAE) SYSTEMS IN THE MITEFAUNA (ACARI) COMMUNITY OF COMMERCIAL POULTRY FARMS, SOUTHERN OF BRAZIL

T.B. Horn[1,2], J. Granich[2], J.H. Körbes[2], M. Senter[2], L.C.O. Silva[2] & N.J. Ferla[2]
[1]Tecnovates; [2]Laboratório de Acarologia, UNIVATES Centro Universitário, Lajeado, RS.

This study aimed to know the diversity of mites associated to traps in different systems of commercial laying hens (*Gallus gallus domesticus* L., 1758) (Phasianidae), in Taquari Valley, Rio Grande do Sul, Brazil. Samplings were conducted from August 2013 to August 2014, totaling 21 sampling events. Three different commercial laying hen systems were evaluated: I) automatic systems of production ($A_{1,2,3}$); II) semiautomatic systems ($S_{1,2}$); III) free range system (FR). A total of 9,981 mites belonging to 21 families, 31 genera and 35 species were found. Acaridae, Caligonellidae and Cheyletidae, showed the highest richness with four species each other. *Megninia ginglymura* (Mégnin, 1877) (Analgidae) was the most abundant ectoparasite species with 1,328 specimens and was present in all commercial laying hen systems. No hematophagous mites were observed. *Cheyletus malaccensis* (Oudemans, 1903) (Cheyletidae) (3,503), *Typhlodromus* (*Anthoseius*) *transvaalensis* (Nesbitt, 1951) (304) (Phytoseiidae) and *Blattisocius keegani* (Fox, 1947) (Blattisociidae) (181) were the predators present in all systems. Among the generalist mites stood out *Brachytydeus tuttlei* (Baker, 1965) (446), *B. oregonensis* (Baker, 1970) (Tydeidae) (154) e *Pyroglyphus* sp. (3,263) (Pyroglyphidae). The similarity of control system (S_1 - without pesticide) was low (36.5%) when compared to all other systems and it had the highest richness. In FR low populations of mites and the highest diversity were observed. In this system, the laying hens showed no skin damage and had intact feathers. We conclude that the commercial laying hen system and the management influence the mitefauna in poultry farms.

Keywords: Aviculture, *Cheyletus malaccensis*, ectoparasite, *Megninia ginglymura.*
Financial support: SDECT, TECNOVATES