

Poster – Session 5

## **Effect of the moisture of soil in position of cocoons of earthworms *Pontoscolex corethrurus* (Annelida; Oligochaeta, Glossoscolecidae)**

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The ability of *Pontoscolex corethrurus* to colonize an ample variety of agroecosystems is well-known and to understand the factors that take part are of great relevance to design new practices that include their handling, to improve soil fertility. The present study had as objective to investigate if the earthworm *P. corethrurus* has a preference for certain soil moisture to deposit its cocoons and their influence in the incubation period. The study was divided in two stages. First, in terrariums modified (0.35 x 0.45 x 0.005m) with an adult earthworm (clitellum), manipulating (50 days) in a combined form, the moisture content (25, 33 and 42%; with 5 replicates each) in three depths of ground. Second, in order to eliminate the possible effects of the interaction of three moist within the terrariums, manipulating (60 days) in separated from the soil moisture content (25, 33 and 42%, with 5 replicates each) registering the number, position and the incubation duration of cocoons deposited by *P. corethrurus*. The preliminary results indicate that the humidity of soil, independent of the depth, had a significant effect in the cocoon position. *P. corethrurus* deposited cocoons in the three moist of the soil; nevertheless, the major and minor numbers of cocoons were deposited with a humidity of 33 and 42%, respectively. In addition, the youthful earthworms emerged in minor and major time with an intermediate and high moist, respectively.