## Further observations on the sensitive innervation of some bird's proctodeum

## Giovanni Palmieri<sup>°</sup>, Marina Sanna<sup>°</sup>, Luisa Bo Minelli<sup>°°</sup>, Maddalena Botti<sup>°°</sup>, Aldo Corriero<sup>°°°</sup>, Salvatore Desantis<sup>°°°</sup>, Maria Grazia Cappai<sup>°</sup> and Franca Acone<sup>°</sup>

<sup>°</sup> Department of Animal Biology, Anatomy Section, University of Sassari <sup>°°</sup> Department of Animal Health, University of Parma <sup>°°°</sup> Department of Animal Health and Welfare, University of Bari

Key words: birds, sensitive innervation, proctodeum

## SUMMARY

The AA. studied the autonomic and sensitive somatic innervation of some female bird's proctodeum, through the properly modified Ruffini's gold chloride method.

The vegetative component was constituted by ganglion cells of different size, isolated or grouped to form ganglia, found along the course of nerve trunks or in the concurrent point of different nerve bundles.

The sensitive somatic innervation was represented by free and encapsulated endings differently distributed in the thickness of the wall. The former were composed of thin networks, while the latter, located more frequently in the muscular tunica and in the subadventitial connective, were composed of encapsulated receptors classified as Pacini, Pacini-like and Herbst corpuscles. The morphology of these receptors was described and hypotheses were brought up about their probable functional role.

The AA. also found, even if very rarely, helicoidal collagen fibres around nerve fascicles.