

On the sensitive and vegetative innervation of the ostrich's palate

**Giovanni Palmieri [°], Franca Acone [°], Marina Sanna [°],
Luisa Bo Minelli ^{°°}, Maddalena Botti ^{°°}, Marcello Maxia ^{*},
Aldo Corriero ^{°°°} and Gregorio De Metrio ^{°°°}**

[°] Department of Animal Biology, Sassari University

^{°°} Department of Animal Health, Parma University

^{°°°} Department of Animal Health and Welfare, Bari University

^{*} Trexenta Ostrich Farm, Ortacesus, Sardinia, Italy

Key words: ostrich, palate, innervation

SUMMARY

The sensitive and autonomic innervation of the palate in the ostrich was studied employing an usual histological technique as hematoxylin-eosin or different impregnative methods as gold chloride according to Ruffini, third formula of Cajal and Bielschowsky technique modified by Gros-O. Schultze.

The autonomic innervation was represented by isolated or grouped ganglion cells located along the course of nerve bundles.

The sensitive innervation was composed by free and capsulated nerve endings usually distributed in the thickness of the lamina propria, in the most superficial part the first one, while the latter was located often close to the basement membrane or in contact with the periosteum or else in the connective tissue between the glands. The very numerous capsulated nerve endings, morphologically classified as Herbst, showed the typical structure, were not uniformly distributed throughout the palate and could be observed isolated and rarely assembled to organize simple flower sprays or to constitute oppositopolar corpuscles.

The Authors have put forward a hypothesis on the possible functional role of the above-mentioned nervous components.