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凹耳蛙消化道组织学和嗜银细胞形态观察

Morphological Studies of Digestive Tract and Its Argyrophil Cells in Sunken Ear Frog

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中文摘要:

为了揭示凹耳蛙(Odorrana tormota)消化道的基本特征,运用石蜡切片法和龙桂开银浸法对凹耳蛙消化道组织学结构及嗜银细胞的形态与分布密度进行了观察。结果显示:1凹耳蛙的胃壁具明显的纵行皱襞和胃小凹,胃腺发达,小肠可分为十二指肠和回肠,杯状细胞分散在十二指肠上皮细胞之间,十二指肠中未见十二指肠腺分布。2凹耳蛙嗜银细胞见于消化道全长,呈毛笔头样、锥体形、梭形、椭圆形和长条形等;幽门腺上皮和十二指肠绒毛上皮中的嗜银细胞具指向腺泡腔或肠腔的突起,提示其可能具有腔分泌的功能。嗜银细胞的分布密度胃幽门部最高,十二指肠和胃体其次,食道最低。据此认为胃既是凹耳蛙的主要消化器官,也是消化道中主要的内分泌器官;十二指肠是凹耳蛙消化道中的主要吸收部位,同时也具有内分泌功能;消化道嗜银细胞具有内分泌的功能,还可能具有腔分泌的功能。

英文摘要:

To reveal the basic characteristics of the digestive tract of Sunken Ear Frog(Odorrana tormota), paraffin section and Longguikai's silver staining were used to observe histological characteristics and distribution density of argyrophil cells in the digestive tract. Longitudinal plica and gastric pits were obviously observed on the gastric wall and glands were well developed. The small intestine could be divided into duodenum and ileum, with goblet cells scattered among the duodenum epithelial cells, while no glands were found in the duodenum. Argyrophil cells in various shapes, such as brush-headed, conical, spindle-like, elliptical and rectangular, were observed along the whole digestive tract, and these cells in gland epithelium of pilori and villus epithelium of duodenum had apophysis pointing to the acinar lumen or intestine, indicating the possible luminal secretion function of these cells. Pylorica part of suomach had the highest density of argyrophil cells, followed by the duodenum and the body of stomach, and the least in esophagus. Therefore, the stomach is believed to have both digestion and secretion functions in Sunken Ear Frog, and the duodenum is the main absorption tract, with some secretion functions. Argyrophil cells in the digestive tracts have both endocrine function and luminal secretion ability.

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