

斜带石斑鱼(♀)×鞍带石斑鱼(♂)杂交子代幼鱼消化道粘液细胞和胃泌素细胞的研究

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Study on mucous and gastrin cells of digestive tract in Qinglong grouper (*Epinephelus coioides*♀×*E.lanceolatus*♂) juvenilesLI Jia'er¹, WU Shuiqing^{1,2}, OU Youjun¹, LIU Jianghua^{1,2}, WEN Jiufu¹, WANG Pengfei¹

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摘要

利用组织化学(AB-PAS)和免疫组织化学(SABC)的方法分别对斜带石斑鱼(*Epinephelus coioides*♀)×鞍带石斑鱼(*E.lanceolatus*♂)杂交子代(青龙斑)幼鱼消化道的粘液细胞和胃泌素(gastrin, Gas)分泌细胞的分布进行系统的研究。青龙斑幼鱼食道中有I、II、III和IV型粘液细胞,含中性粘多糖和酸性粘多糖。贲门胃粘液细胞有I、II、III种类型,胃体部有I、III、IV型粘液细胞,在胃腺的周围含有较多的I和IV型粘液细胞,而幽门胃中只有I型粘液细胞,只含有中性粘多糖。幽门盲囊和肠道都含有中性粘多糖和酸性粘多糖,幽门盲囊以II型粘液细胞最多,少量的III型粘液细胞,前肠、中肠和后肠均有4种类型的粘液细胞。肠道粘液细胞数量为中肠>后肠>前肠。利用免疫学的方法研究青龙斑幼鱼消化道Gas细胞的分布,表明幼鱼的整个肠道和幽门盲囊均有Gas细胞的存在,食道和胃中未发现Gas免疫阳性细胞。

关键词: 斜带石斑鱼, 鞍带石斑鱼, 杂交子代, 消化道, 粘液细胞, 胃泌素细胞

Abstract:

We studied the distribution of mucous and gastrin cells of digestive tract in Qinglong grouper (*Epinephelus coioides*♀×*E.lanceolatus*♂) juveniles by histochemistry (AB-PAS) and immunohistochemistry (SABC). Mucous cells in esophagus of juvenile were of Type I, Type II, Type III and Type IV containing neutral and acidic mucoitin; mucous cells of Type I, Type II and Type III were found in cardiac stomach; mucous cells of Type I, Type III and Type IV were found in fundic stomach. Many mucous cells of Type I, and Type IV could be found around gastric gland, and only mucous cells of Type I containing neutral mucoitin was found in pyloric stomach. Pyloric caeca and intestines contained neutral and acidic mucoitin. Mucous cells in the pyloric caeca were mostly of Type II but less Type III. Four types of mucous cells could all be observed in foregut, midgut and hindgut. The descending order of number of intestinal mucous cells was midgut>hindgut>foregut. Moreover, the study on the distribution of gastrin cells in the digestive tract by immunohistochemistry indicates that the gastrin cells were found in entire intestine and pyloric caeca but not in esophagus and stomach.

Key words: *Epinephelus coioides*, *E.lanceolatus*, hybrid, digestive tract, mucous cells, gastrin cells

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