
(Salmo trutta caspius)

(Parr)

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Archive of SID

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(Smolt)

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(PAS

(BPB

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- Periodic Acid Schiff
 - Brom Phenol Blue

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- Histology
 - Histochemistry
 - Enzymetic

BPB

. () (Parraffinization)

PAS

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BPB

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parr

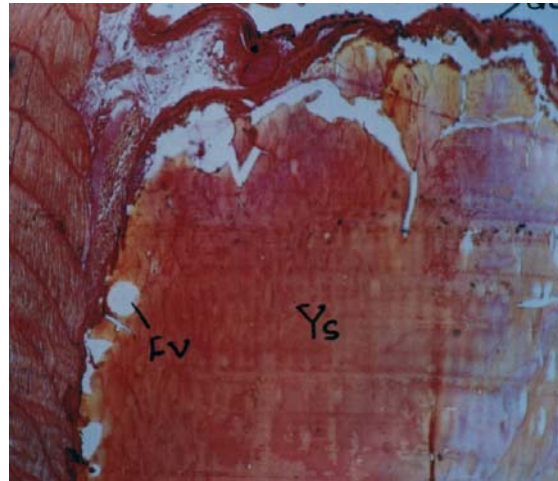
. ()

PAS

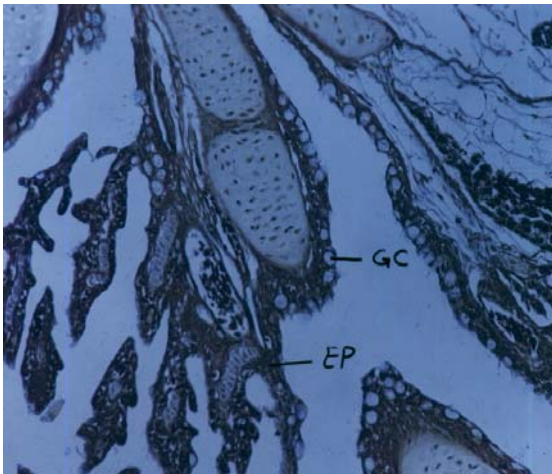
Goblet cells



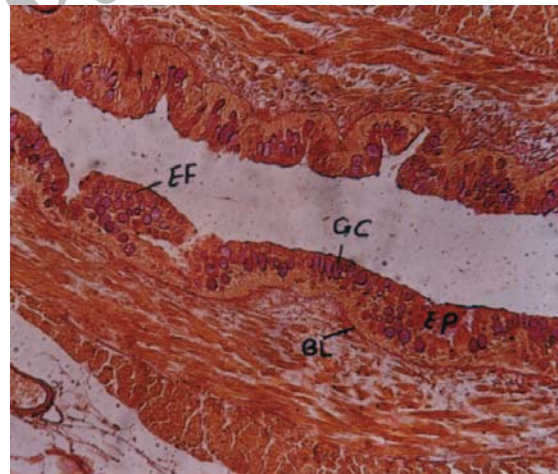
:GC :E PAS×1000
:ph :L



:Ys :Fv PAS×400
:Gc



:GC :EP BPB×1000



:BL :GC :EF PAS×1000
:EP

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BPB PAS

PAS

PAS

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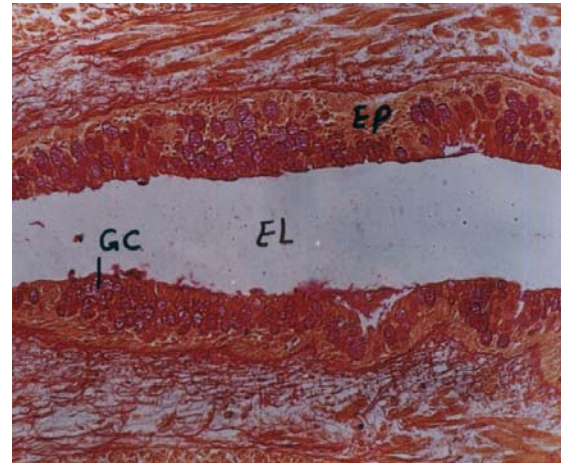
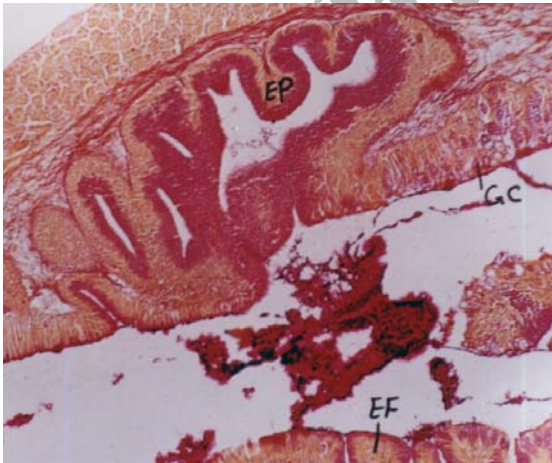
BPB

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BPB

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PAS×1000

:GC

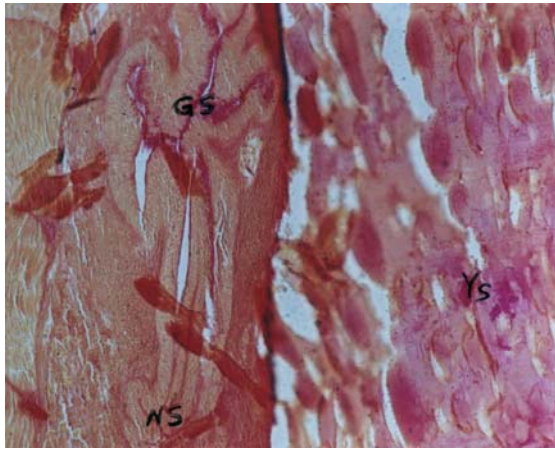
:EF

:EP

:EP

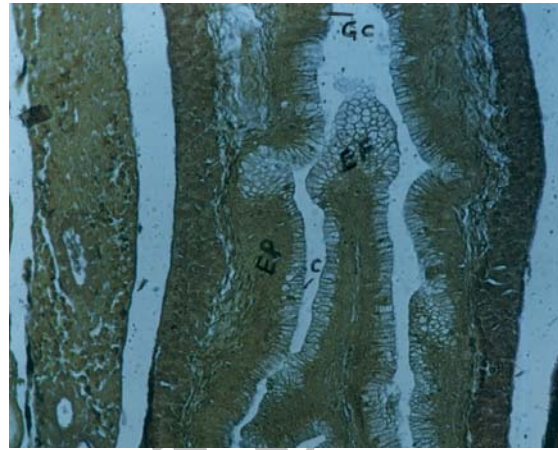
:EL

:GC PAS×1000



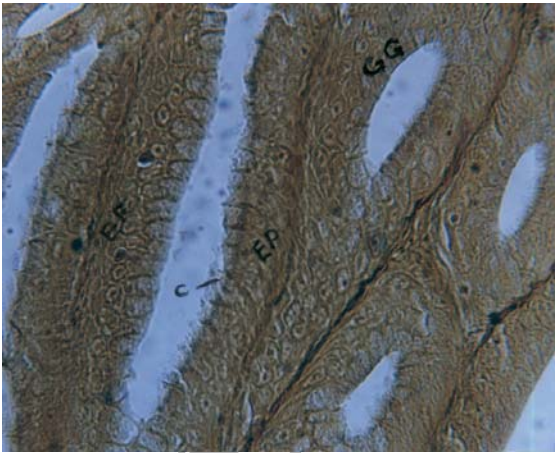
PAS×1000

:Ys :NS :GS



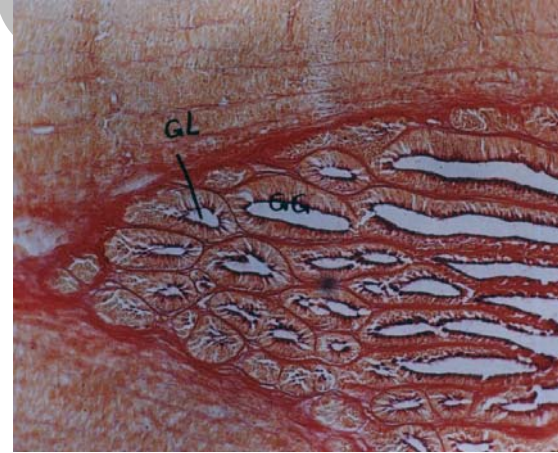
:EP BPB×1000

:EF :C :GC



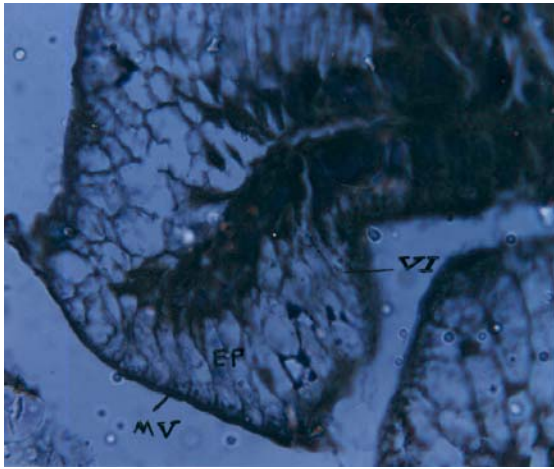
:EF BPB×4000

:EP :C :GG



:GL PAS×1000

:GG



MV BPB×4000
VI EP

SV GC PAS×1000
EP

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Solea solea
Sparus auratus)
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BPB PAS

BPB

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BPB PAS

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Archive of SID

Salmo trutta)

(*caspius*

(*Salmo trutta caspius*)

(*A. persicus*)

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A Histochemical Study of the Digestive tract of Caspian Salmon (*Salmo trutta caspius*) from Hatching to Parr Stage

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Abstract

This research was conducted to determine the histological features as well as distribution of proteins, carbohydrates and fatty rich tissue of alimentary canal in Caspian salmon (*Salmo trutta caspius*) from hatching to parr stage. Samplings were carried out from one-day stage (just after hatching), 10 and 25 days, and then in 1, 2,3,4,5, and 6 month post hatching. Light microscopical observation was carried out after preparing tissue based on conventional method tissue processing and special staining method, (PAS & Bromo Phenol Blue). Light microscopic results indicated that, in one –day post – hatch larvae, yolk sac makes the greatest part of the body. The alimentary canal is a simple, undifferentiated tube with mouth opening to some extent. Yolk sac contains mainly proteins, neutral polysaccharides, and to a lesser extent fats. Secretion activity begins in the mouth, pharynx and esophagus epithelium with appearance of neutral mucopolysaccharide components, covering the digestive tract's epithelium which indicate it's protective activity. When exogenous Feeding started in 25 days post hatch larvea, secretion of protein components began in mucose layer which was stronger in the esophagus mucosal folds. This indicated high enzymatic activity in this region which decreased after start of exogenous feeding and being compensated for by stomach and intestine enzyme activity.

Keywords: Caspian salmon, Digestive tract, Parr, Exogenous feeding

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