

UVOZ ŠARANA NOVE – STARE OPASNOSTI



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Dermocystidium koi Hoshina i Sahara, 1950.



Gjurčević E.

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Dermocystidium infection in common carp broodstock (*Cyprinus carpio* L.) from Croatia

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Abstract

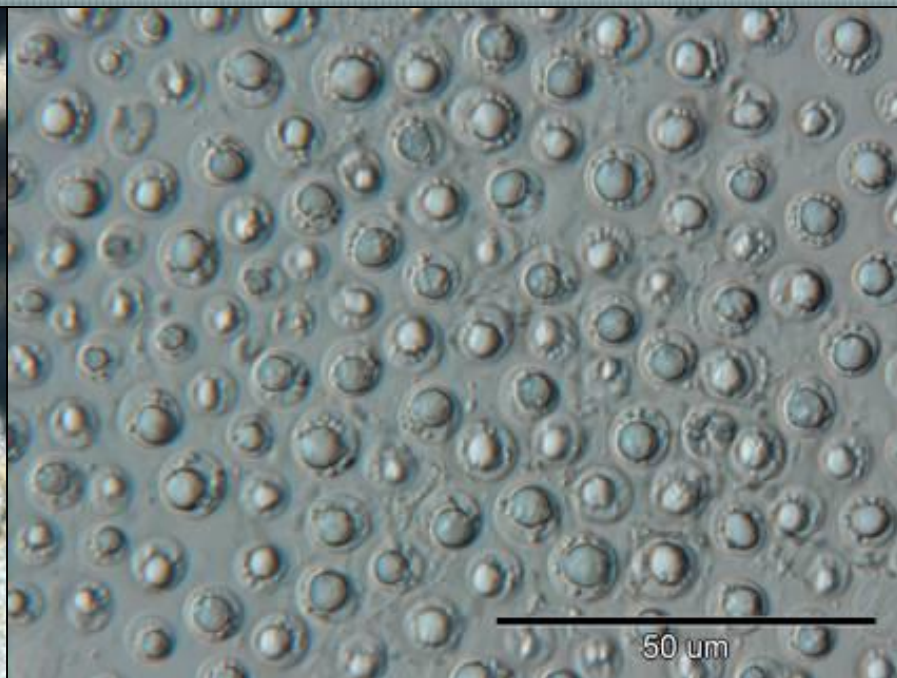
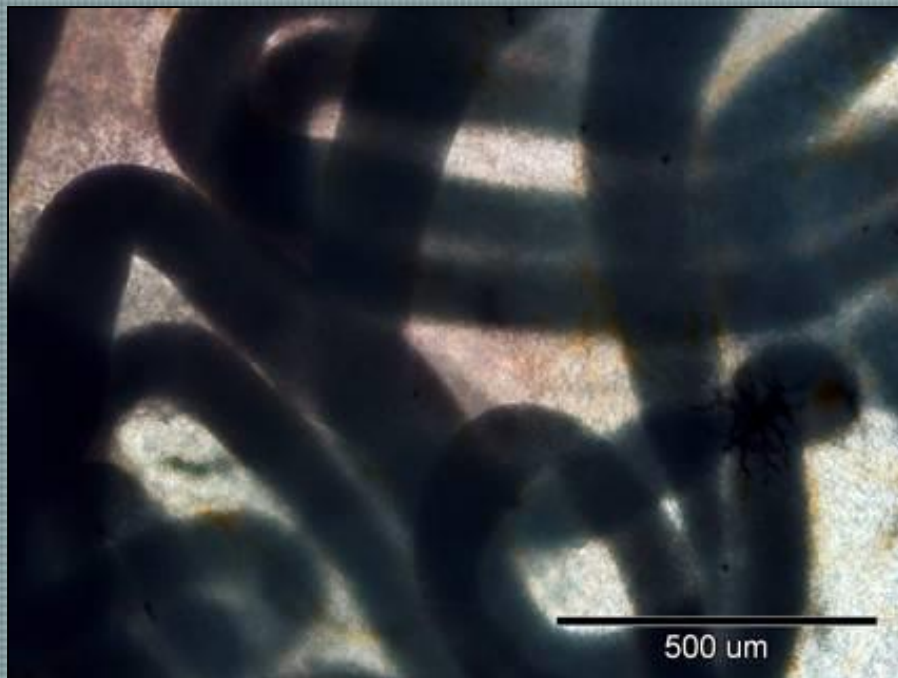
This paper presents the first finding of *Dermocystidium* sp. in Croatia. The species was found on a fish farm, in broodstock of common carp (*Cyprinus carpio* L.). The localisation of the hyphae and morphological characteristics of spores confirms that the species is identical with *Dermocystidium* sp. described by Novotny & Smolova (2006). Hyphae were $109 \pm 44 \mu\text{m}$ (mean $\pm$ SD) wide, with $4.8 \pm 1.3 \mu\text{m}$ thick homogeneous walls. Mature and immature spores measured $8.3 \pm 1.5 \mu\text{m}$ and $5.1 \pm 0.2 \mu\text{m}$, respectively. The refractile body was $4.7 \pm 0.9 \mu\text{m}$ in diameter. Despite small variations in size, the authors tentatively identified this species as *Dermocystidium koi* Hoshina & Sahara, 1950.

Introduction

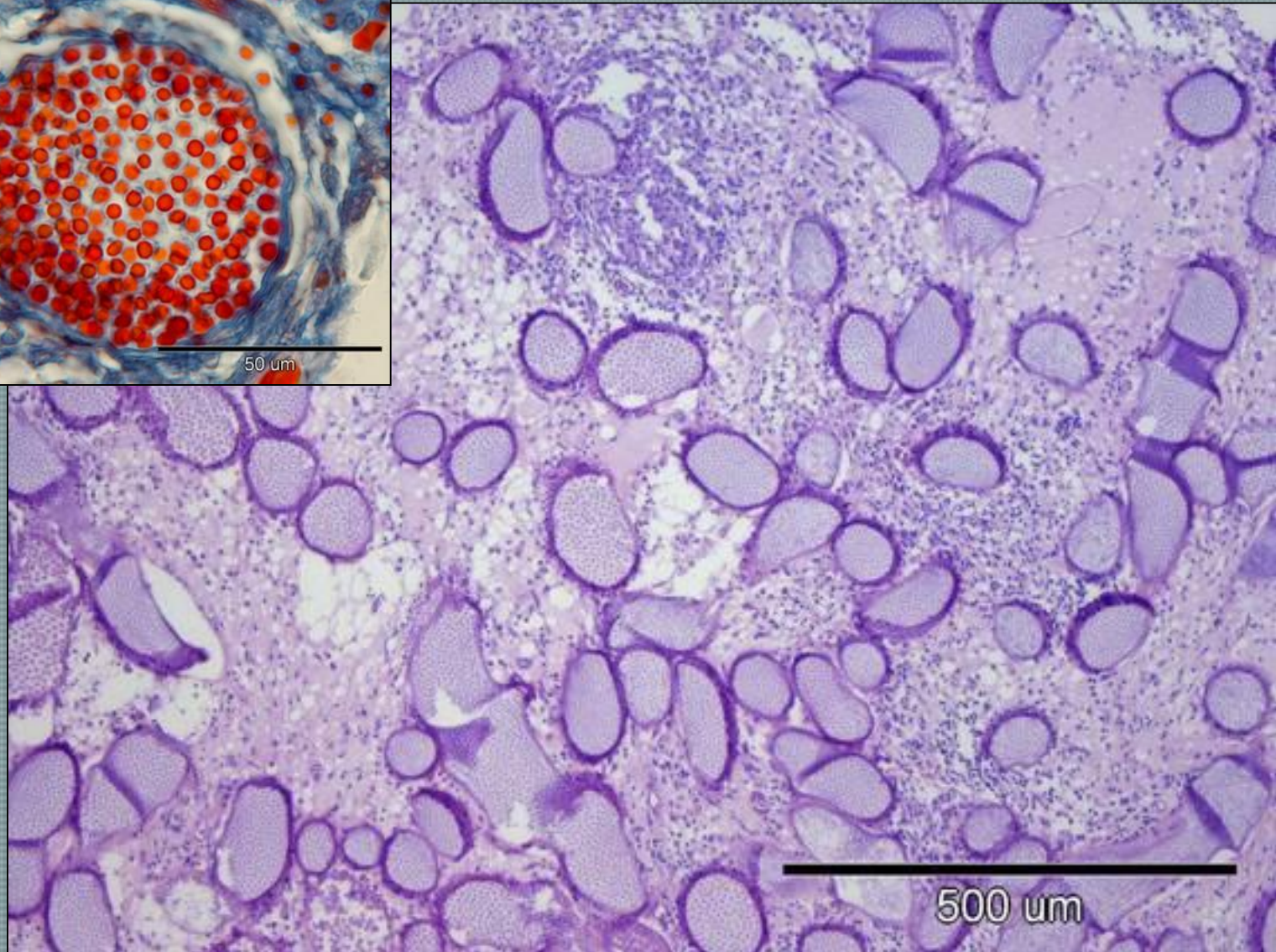
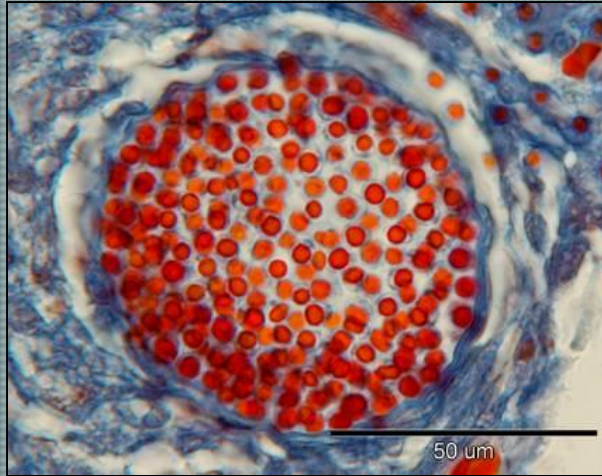
Dermocystidium infection in various freshwater fish has been studied worldwide. To our knowledge, so far only a few *Dermocystidium* spp. have been reported in fish belonging to the Cyprinidae family, namely *Dermocystidium koi* Hoshina & Sahara, 1950, *Dermocystidium kamilevi* Allamuratov, 1965, *Dermocystidium kobiacevi* Allamuratov, 1965, *Dermocystidium cyprini* Cervinka & Lom, 1974 and *Dermocystidium erschowi* Garkavi, Denisov & Afanasjev, 1980. Furthermore, Novotny & Smolova (2006) described *Dermocystidium* sp. in the skin of common carp originally imported to the Czech Republic from Hungary, and Molnár et al. (2008) described *Dermocystidium* sp. in the eye of crucian carp in Hungary. In general,

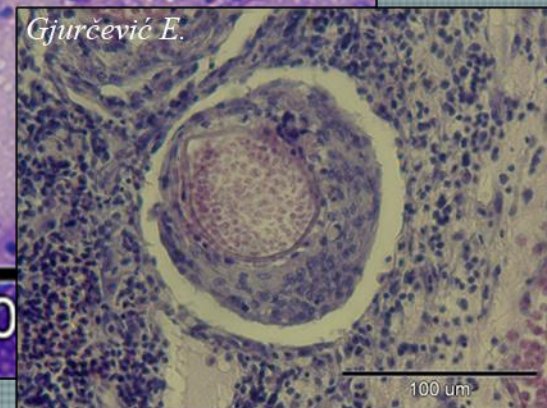
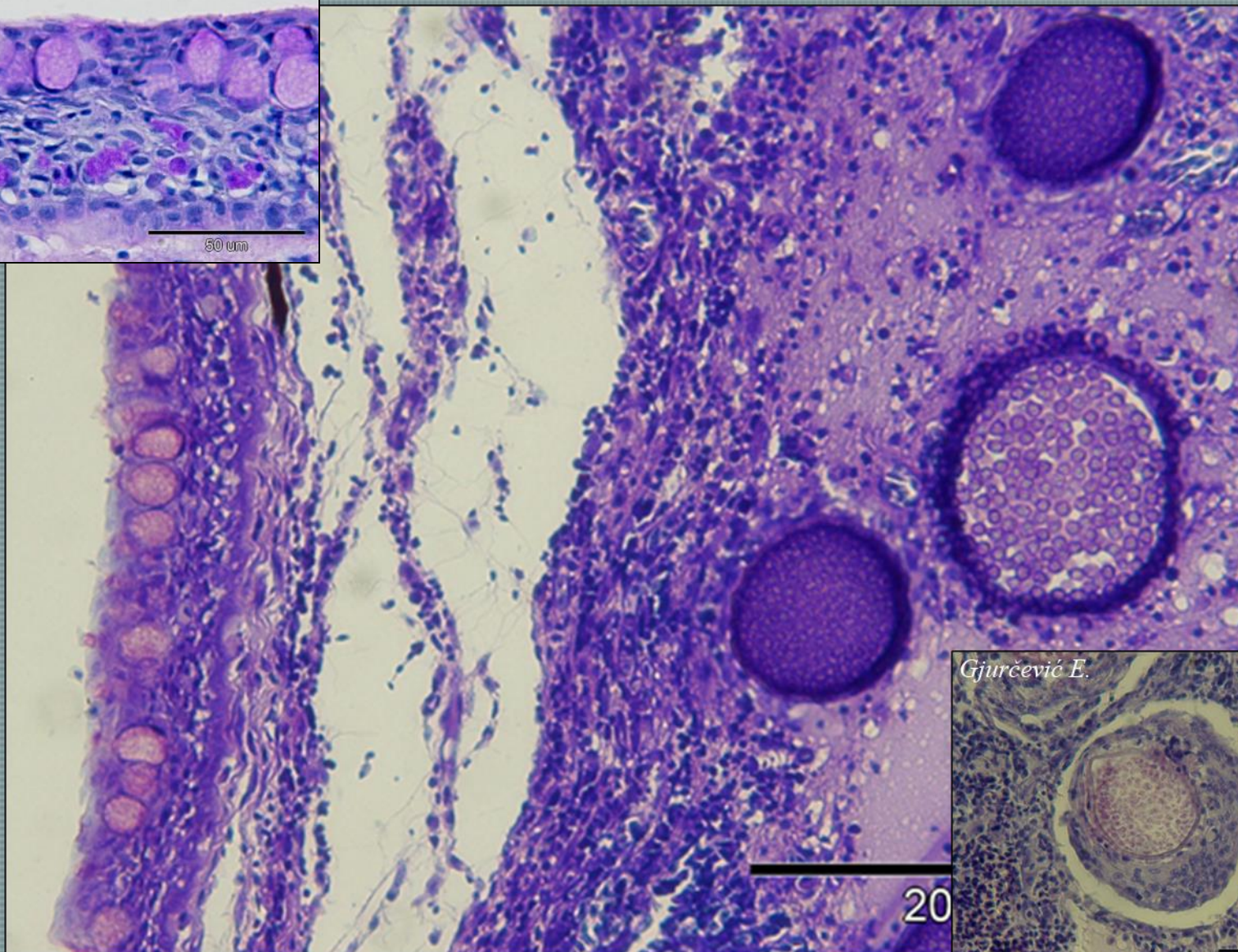
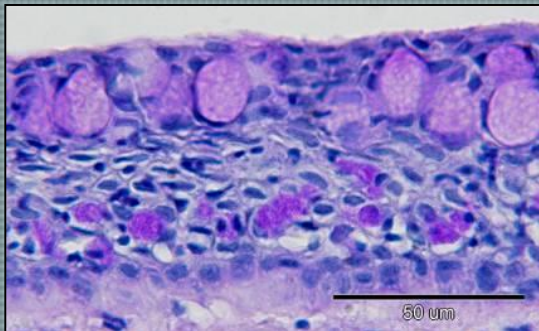
Dermocystidium infections are manifested as cysts with different localization and morphology of the spores, depending on the parasites species (Novotny & Smolova, 2006). However, unlike other species of the genus, *Dermocystidium koi* forms long spore-producing hyphae (Dykova & Lom, 2007). Garkavi et al. (1980) also mentioned a fungoid form of cysts in the skin of carp infected with *Dermocystidium erschowi*. As *Dermocystidium* infections have not been previously reported in Croatia, the aim of this study was to determine the presence and prevalence of *Dermocystidium* sp. and to describe histopathological changes found in the fins of common carp. Furthermore, this paper presents the morphological characteristics of the parasite from fresh preparations and histological sections.

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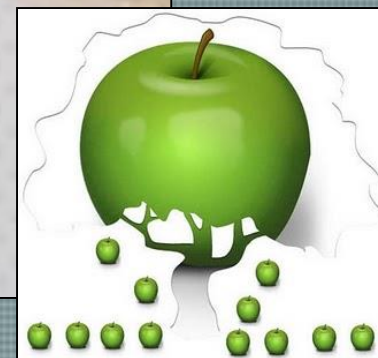
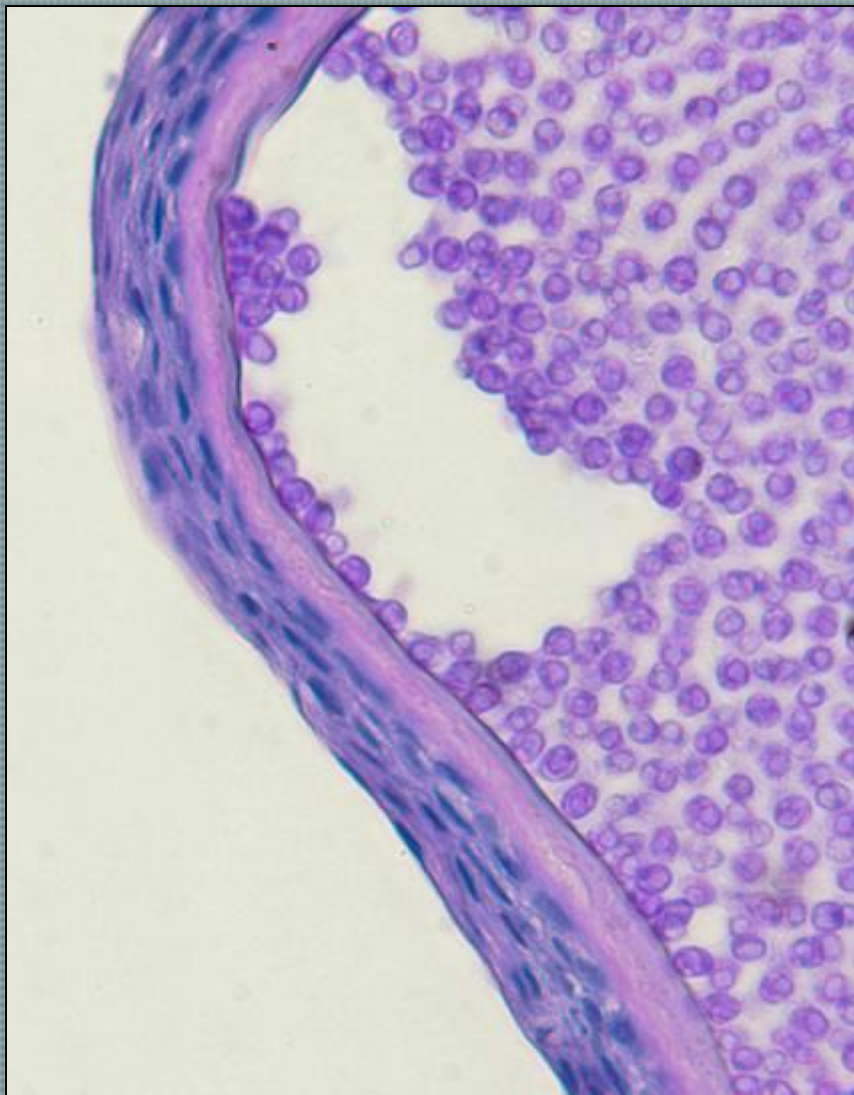


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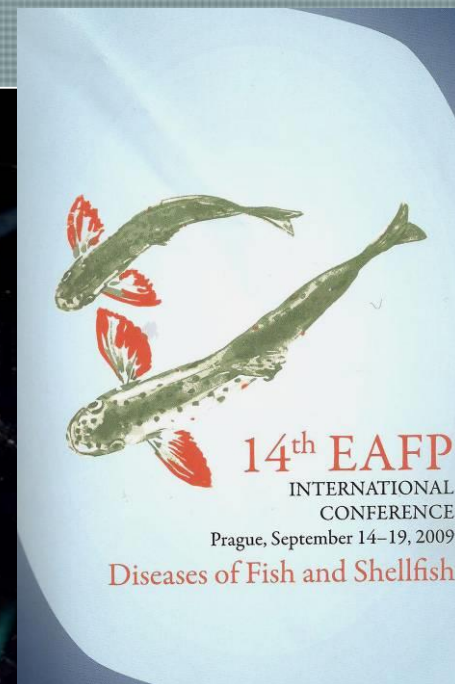
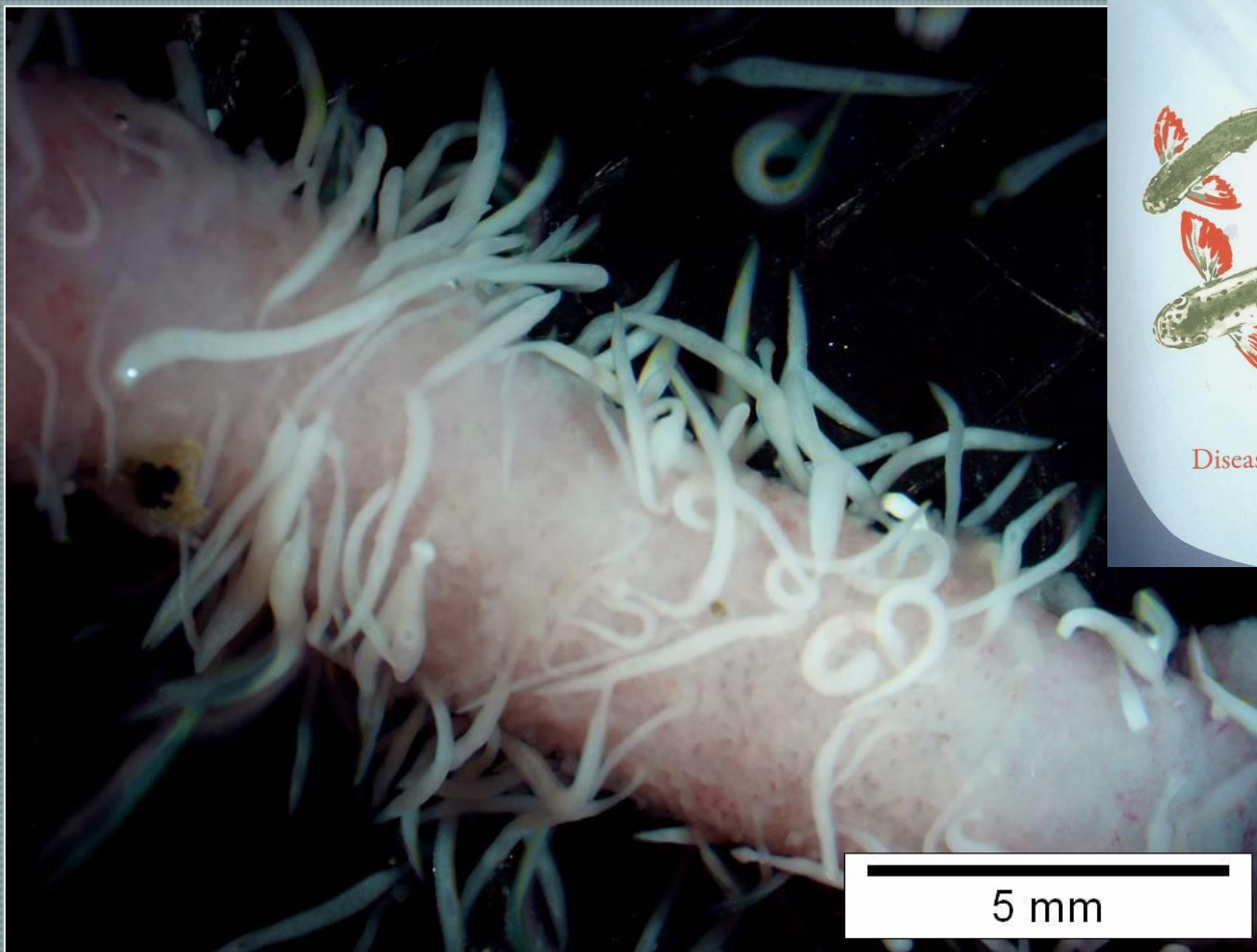




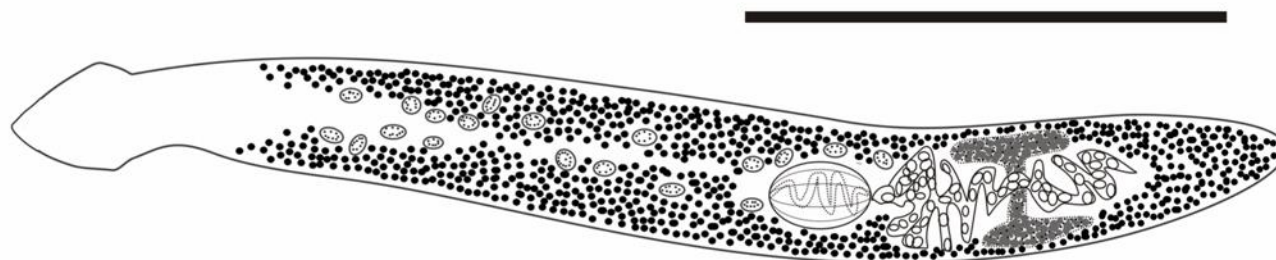
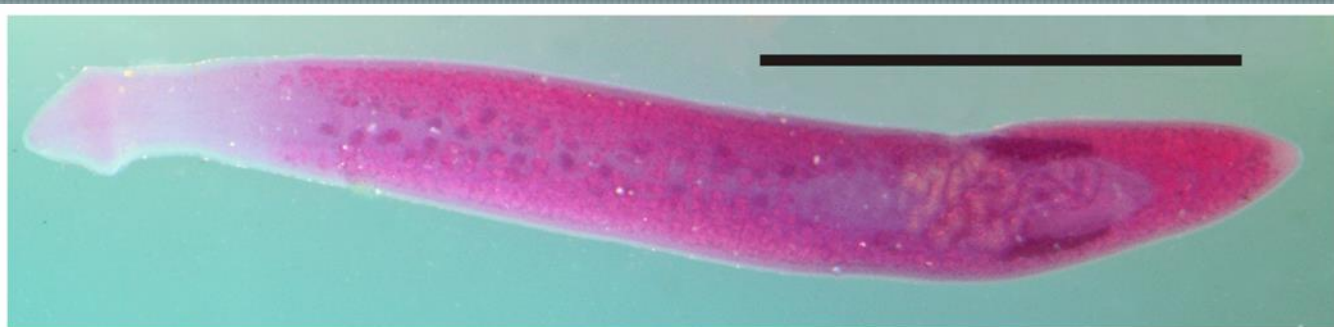
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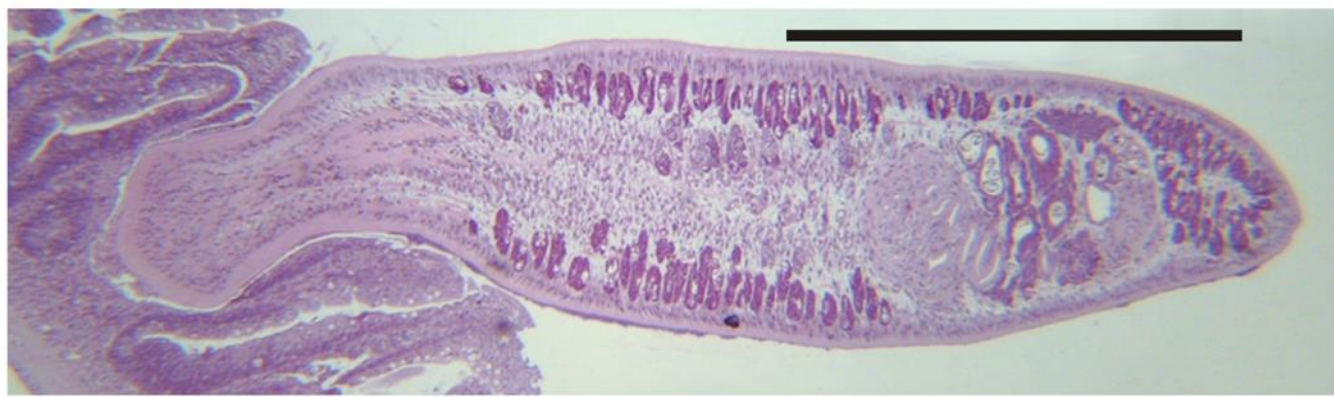
Atractolytocestus huronensis Anthony, 1985.

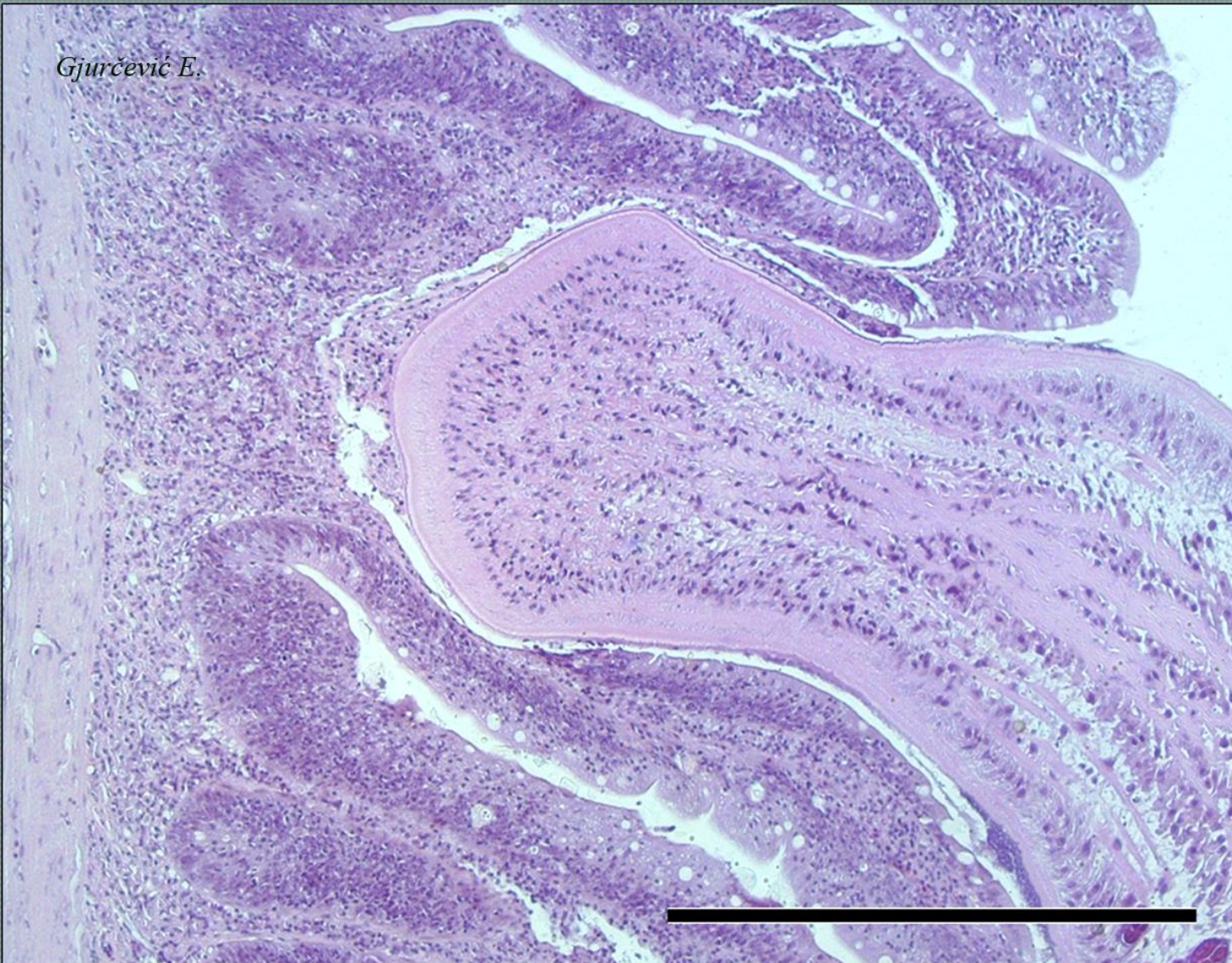


VELIKA BRITANIJA, MAĐARSKA, ČEŠKA, SLOVAČKA, NJEMAČKA, RUMUNJSKA

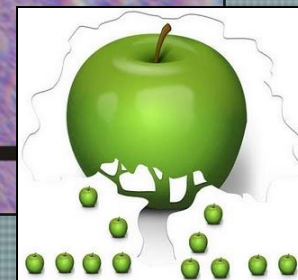


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Gjurčević E.



KOI HERPESVIROZA



16-28°C - razvoj bolesti
100% - pobol
90 do 100% - smrtnost
5 do 25 dana - inkubacija

Cyprinid herpesvirus 3 (CyHV-3)

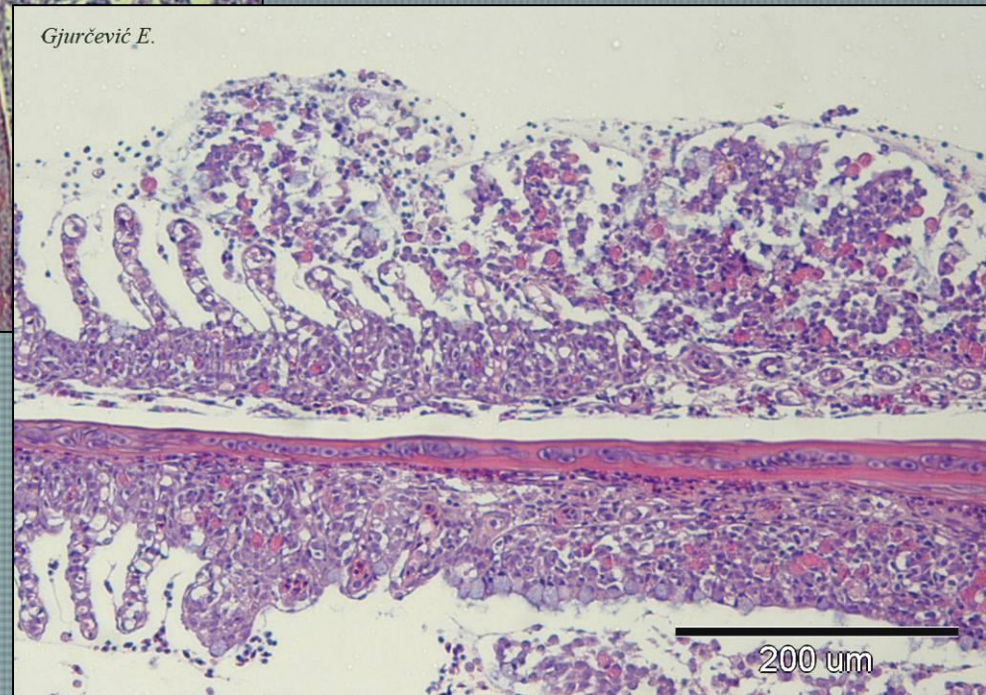
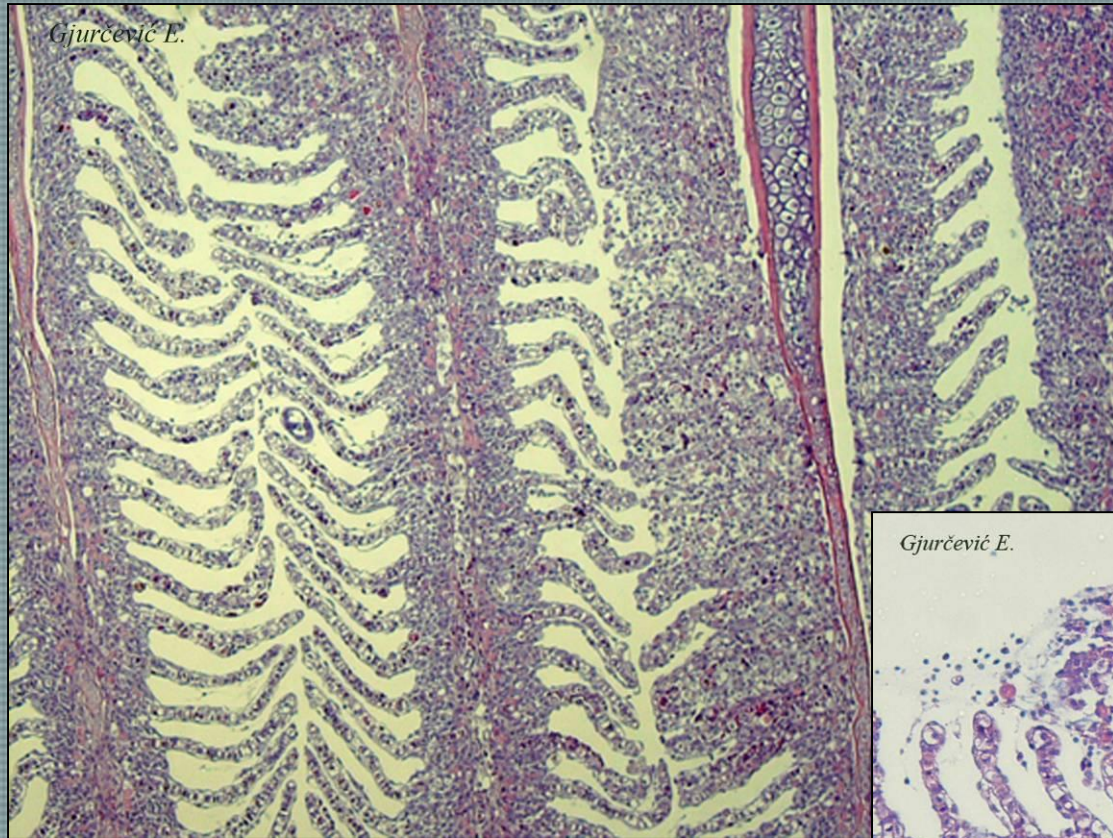
Carp interstitial nephritis and gill necrosis virus (CNGV)

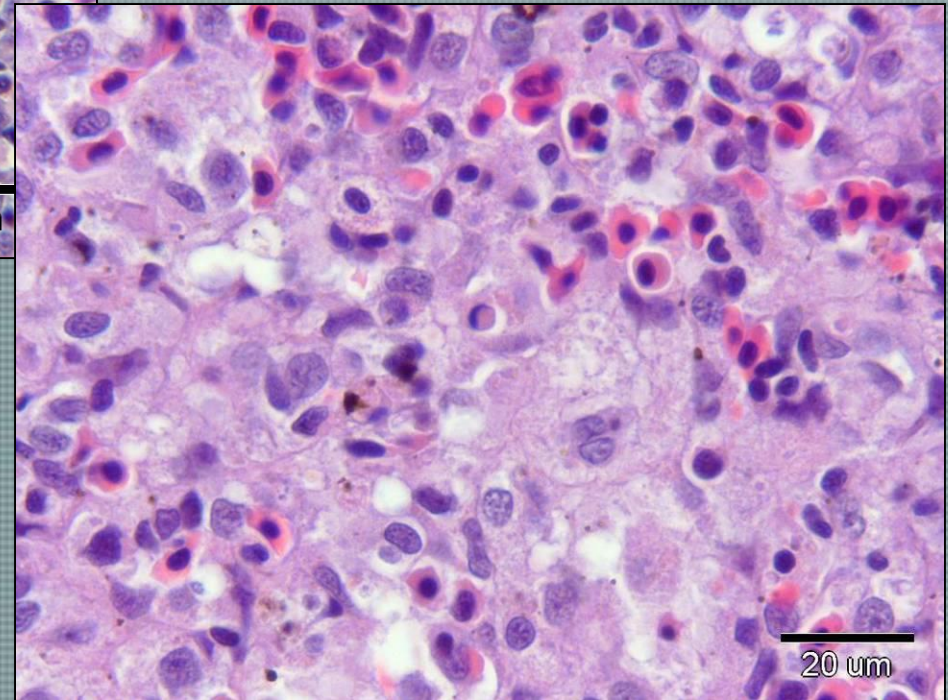
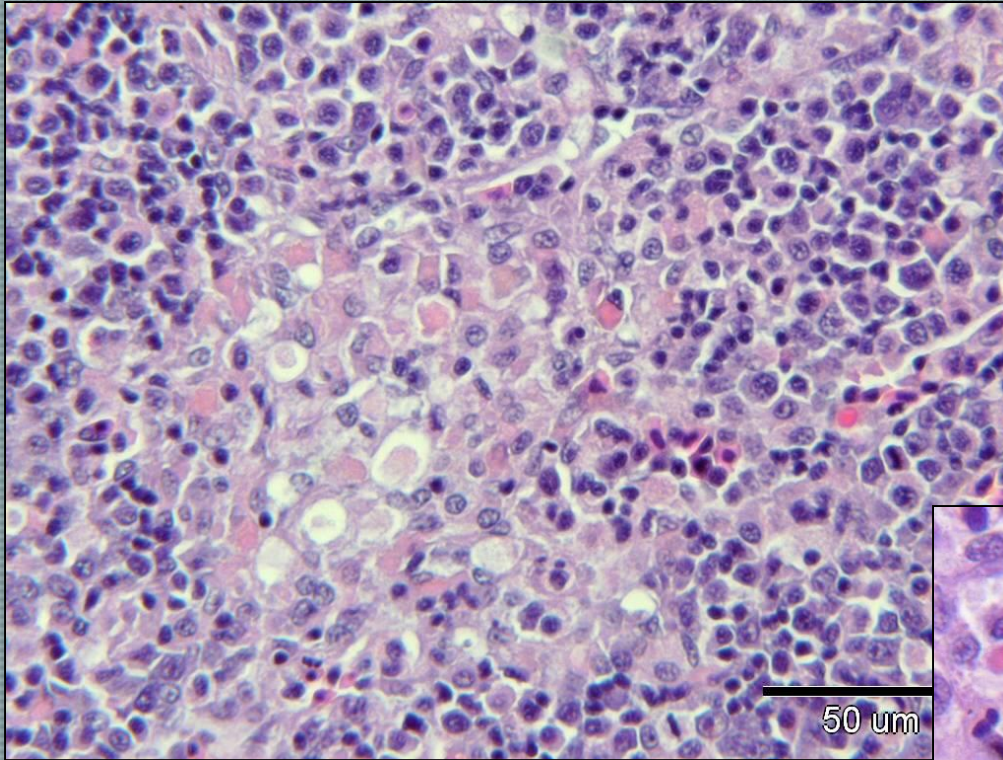
Cefas



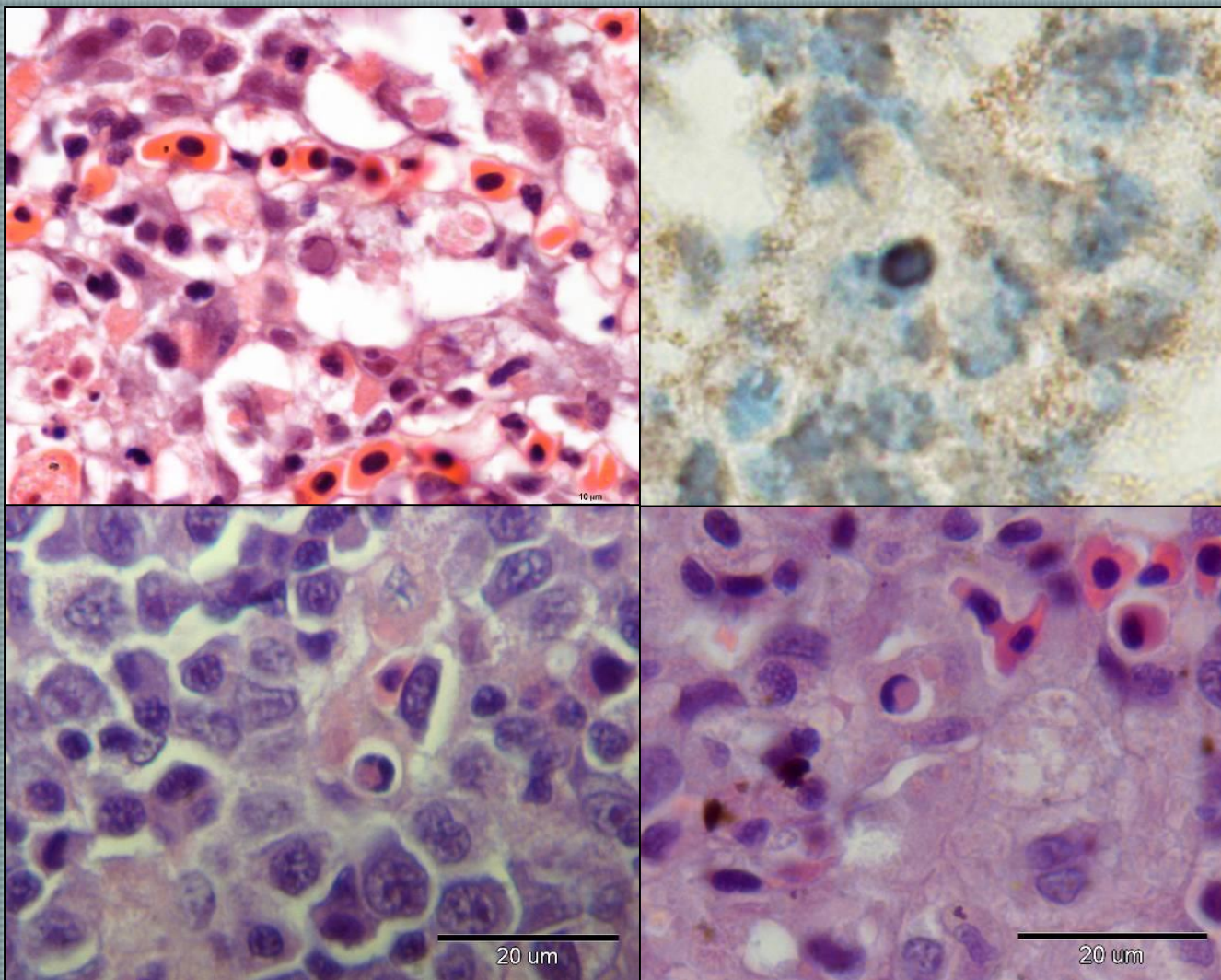
S.W. FEIST & P. TYSON, Fish Health Inspectorate, Cefas

Paul Tyson

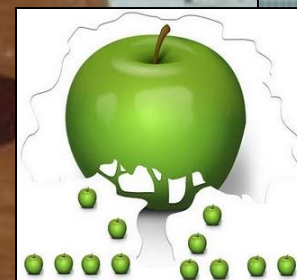




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SMANJENA OTPORNOST PREMA BOLESTIMA



Genetic resources
of common carp at the
Fish Culture Research
Institute, Szarvas, Hungary

FAO
FISHERIES
TECHNICAL
PAPER

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Food
and
Agriculture
Organization
of the
United
Nations



BAKOS i GORDA (2001.)



2,15%



2,8%

SAFNER (1998.)







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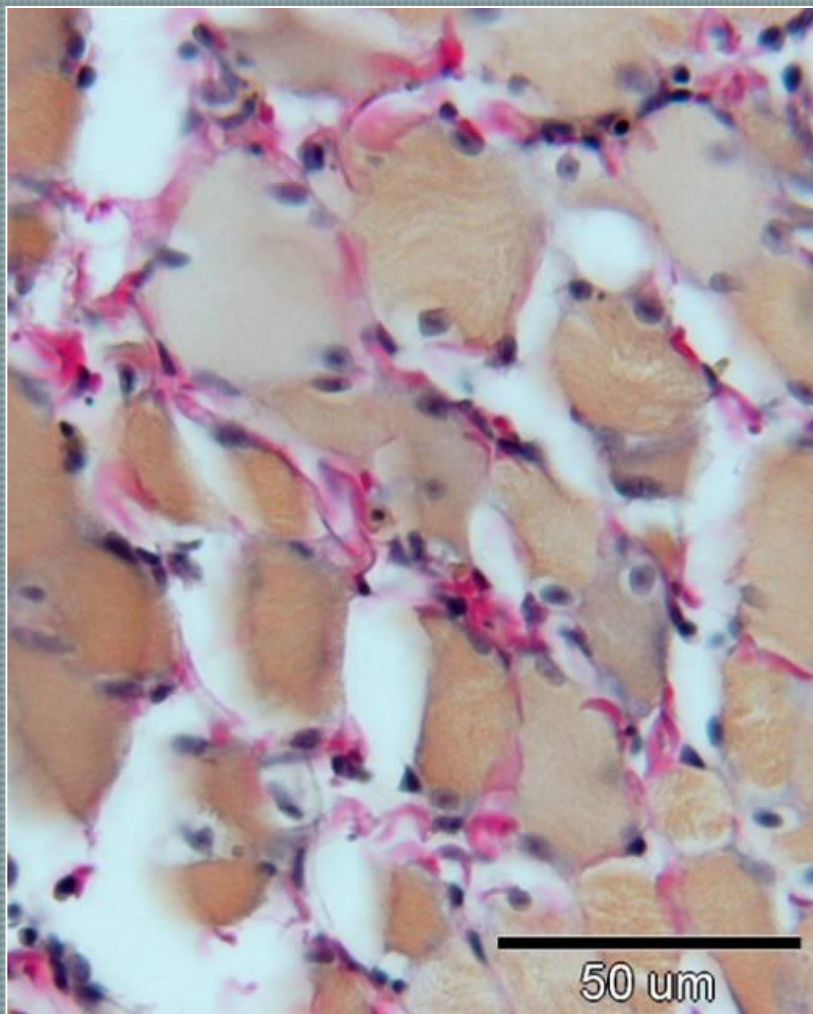


- povijanje kralježnice; skolioza, lordoza i kifoza
- hemivertebra
- blok kralježaka
- subluksacija kralješka
- napuknuće tijela kralješka
- skraćanje tijela kralješka
- zadebljanje rubova tijela kralješka
- zadebljanje zigapofiza
- kalusno zadebljanje neuralnog luka i izdanka
- kalusno zadebljanje hemalnog luka i izdanka
- rascjep neuralnog i hemalnog izdanka
- *spina bifida*
- dvostruki neuralni i/ili hemalni izdanak
- povijanje neuralnog i hemalnog izdanka
- povećanje ili smanjenje dužine odnosno širine neuralnog ili hemalnog izdanka
- suženje intervertebralnog prostora

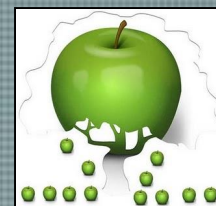




“UROĐENE I STEČENE DEFORMACIJE SKELETNO-MIŠIĆNOG SUSTAVA U RIBA”



Smanjuje kakvoću mesa ribe i umanjuje njezinu tržišnu vrijednost



EPITELIOM (“BOGINJE”) ŠARANA Cyprinid herpesvirus 1 (CyHV-1)





“Dok sam s prijateljima trčao po parkovima svojega djetinjstva, ljutio sam se što neki vrijeđaju stabla ispisujući imena po njima.”
S. Glavašević