

University of South Bohemia in České Budějovice
Faculty of Fisheries and Protection of Waters
Institute of Aquaculture
 Branišovská 1645/31a, 370 05 České Budějovice, Czech Republic
 ☎ +420 389 032 735 e-mail: studijni@frov.jcu.cz VAT: CZ60076658

Confidential

Review of USB FFPW PhD Thesis

Surname of the PhD student: Mgr. Peter Podhorec	Name of supervisor: doc. Ing. Jan Kouřil, Ph.D.
Title of PhD thesis: Artificial reproduction of tench (<i>Tinca tinca</i> L.), with an emphasis placed on hormonal induction of ovulation	
REVIEWER:	
Surname: Černý	Institution: Slovenská akadémia vied, Ústav zoológie, Bratislava
Name: Jaroslav	
Titles: RNDr., CSc.	E-mail: Jaroslav.Cerny@savba.sk
Please describe your professional relationship to the PhD student: none	Please describe your field of expertise: fish ecology, fish culture

QUESTIONNAIRE

Originality, scientific importance, prospects of the PhD thesis and benefits for basic or applied research

Five years ago Mgr. Peter Podhorec graduated on the department of zoology and antropology of the Constantine the Philosopher University, Faculty of Natural Sciences, Nitra. In Slovakia he has no possibilities to study artificial reproduction of fishes, because Institute of fishery research and hydrobiology was canceled after revolution in 1989.

He choose to study artificial reproduction of fishes abroad. I think, no doubt Research Institute of Fish Culture and Hydrobiology Vodňany University of South Bohemia, České Budějovice is the top research institute concerned with fish culture.

A long time supervisor of Peter Podhorec was build present institute although title of institute was changed several times. The level of institute markedly reised Prof. Dipl.-Ing. Otomar Linhart, DSc., present dean of Faculty of Fisheries and Protection of Waters. On the present time Research Institute of Fish Culture and Hydrobiology has very high international prestige.

Subject of PhD thesis Mgr. Peter Podhorec - artificial reproduction of tench, is very original and actual theme not only in Czech republic. Its high-level reaches international top level without problems, because this thesis represents the first report of dopaminergic control of LH release in tench, which showed no difference in ovulation rates after administration of GnRH α alone and in combination with a dopamine.

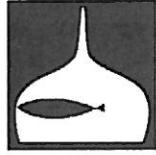
Huge benefits from thesis results will be applied in the fish hatcheries, because Mgr. Podhorec demonstrated high effectiveness of low doses of mGnRH α to induce ovulation in tench **with no need of dopamine inhibitors under optimal as well as suboptimal thermal conditions**. This fact is the most important gain from his thesis.

Preparation of the PhD thesis, targets of the work and deliverables

Format and overall level of preparation of the PhD thesis is regular and its has no mistakes. The aim of thesis is defined comprehensible and the results striking the aim. Metodology and selected approaches is optimally choices.

Overall level of the PhD thesis is on the high niveau. I would like to increase level of this thesis with my critical remarks, but I did not find any incorrectness, any mistakes. That is why I have no critical remarks.

OVERALL COMMENTARY ON THE PhD THESIS



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Please write comments:

The level of PhD thesis is very high within the frame international standard. I have no critical remarks. I suppose that manuscripts appreciated several reviewers, because some parts of thesis are published, and some parts are submitted in high-grade journals.

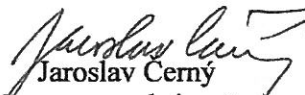
I have some questions:

1. According data from thesis, the cyprinids are considered typical of a fish group with decisively demonstrated DA inhibition of LH release and ovulation, it appears that this does not apply to tench (*Tinca tinca*). Is tench the only cyprinid species with such problems, or exist some other ?

FINAL RECOMMENDATION

- can be recommended for defence of PhD Thesis
 can be recommended with reservations for defence of PhD Thesis
 can not be recommended for defence of PhD Thesis

Bratislava 31.7.2011
Date and place


Jaroslav Černý
Surname and signature



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Title of PhD thesis: Artificial reproduction of tench (<i>Tinca tinca</i> L.), with an emphasis placed on hormonal induction of ovulation	

REVIEWER:

Surname: Brzuska	Institution: Polish Academy of sciences, Institute of Ichthyobiology and Aquaculture, Golysz
Name: Elżbieta	
Titles: prof. dr. hab. inż.	E-mail: elzbieta.brzuska@fish.edu.pl
Please describe your professional relationship to the PhD student: I am in no professional relationship with Mgr. Peter Podhorec	Please describe your field of expertise: Evaluation of the PhD thesis

QUESTIONNAIRE

Originality, scientific importance, prospects of the PhD thesis and benefits for basic or applied research

Evaluate its competitiveness in the international context and compare its level with the current state of the art in the field:

The PhD thesis presented for evaluation is original and essential from the scientific point of view. The level of this work is high and the results constitute a significant contribution to the research carried out in the world on the artificial reproduction of tench (*Tinca tinca* L.). The results obtained by Mgr. Podhorec also are important from the point of view of fish culture practice.

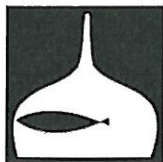
Preparation of the PhD thesis, targets of the work and deliverables

Evaluate the overall level of preparation of the PhD thesis and the originality of the selected approaches; evaluate publications and whether the targets set in the PhD thesis correspond with the declared purpose of the thesis:

The overall level of preparation of the PhD thesis presented for review is fully satisfactory while the selected approaches are fully original. The enclosed papers are on a really high scientific level. Targets set in the PhD thesis correspond with the declared purpose of the thesis.

OVERALL COMMENTARY ON THE PhD THESIS

The PhD thesis presented for review is at a high scientific level. Mgr. Peter Podhorec presented the results of this investigation of tench (*Tinca tinca* L.) which is a valuable food, sport and ornamental fish, carried out in a wide range and in international cooperation. The aims of the investigation were fully realized and the obtained results are important in the aspect of both science and fishery practice. For the above presented reasons PhD thesis by Mgr. Podhorec should obtain the highest appraisal.



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Please write comments:

Apart from me high appraisal of the reviewed PhD thesis, I want to stress that Mgr. Peter Podhorec with a great easiness discusses numerous works from the international literature connected with the investigated problems. It is worth noting that during his PhD study at the Faculty of Fisheries and Protection of Waters Mgr. Podhorec served three scientific internships, this considerably enriching his competence in fishery and aquaculture problems. Mgr. Podhorec manifested his ability of cooperating in a team; this trait positively characterizes him as a future worker of scientific institutions.

FINAL RECOMMENDATION

- can be recommended for defence of PhD Thesis
 can be recommended with reservations for defence of PhD Thesis
 can not be recommended for defence of PhD Thesis

26 May 2011, Gołysz

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Date and place

Brzuska

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Surname and signature