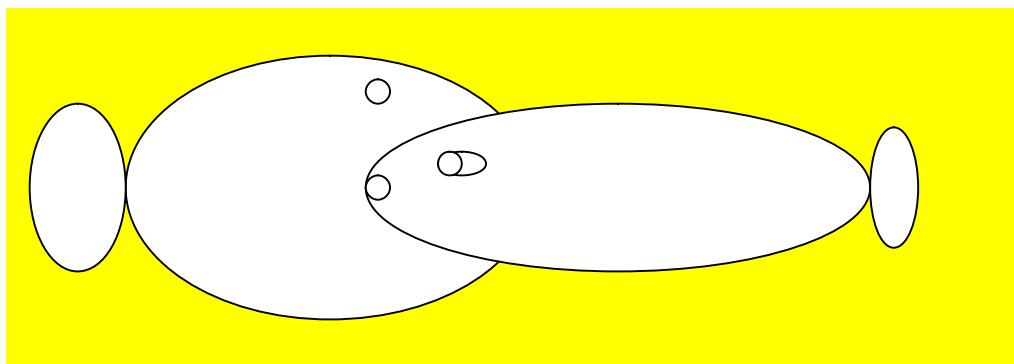


AACL Bioflux, Volume 2 (2)
April 30, 2009

**Aquaculture, Aquarium, Conservation & Legislation -
International Journal of the Bioflux Society**



**Including conference proceedings
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Bioflux 2009

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International Standard Serial Number

Online ISSN 1844-9166

Published by Bioflux - quarterly

The journal includes original papers, short communications, and reviews on Aquaculture (Biology, Technology, Economy, Marketing), Fish Genetics and Improvement, Aquarium Sciences, Fisheries, Ichtiology, Aquatic Ecology, Conservation of Aquatic Resources and Legislation (in connection with aquatic issues) from wide world.

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Abdullah K., Awan A. U., Khattak M. K., Yasmin S., 2009 Biological de-activation of granular formulation of a carbamate insecticide Cartap in water under laboratory conditions. AACL Bioflux 2(2):89-95.

†Celik M. Y., Karayücel S., Karayücel İ., 2009 Effects of environmental factors on growth and mortality of raft cultivated mussel (*Mytilus galloprovincialis* L.) cultivated in lantern nets in Black Sea. AACL Bioflux 2(2):97-108.

Pandi G., Berkesy C. M., Vigh M., Berkesy L. E., Berkessy P., 2009 The impact of mining upon the features of the Blue Lagoon Lake in the Aghireşu area. AACL Bioflux 2(2):109-119.

†Miclăuș V., Petrescu-Mag I. V., Rus V., Cedar D., Oana L., Ober C., 2009 Frequency and polymorphism of Hassall's corpuscles in normal thymus of nutria (*Myocastor coypus*). AACL Bioflux 2(2):121-131.

†Cioboiu O., Brezeanu G., 2009 Hydrobiological and piscicultural features of certain small basins within the Oltenia Plain. AACL Bioflux 2(2):133-136.

Shaddock P., 2009 The See-thru guppy: a transparent fish model. AACL Bioflux 2(2):137-145.

Bănăduc D. S., 2009 Lower Timiș River (Banat, Romania) - Special area for conservation (Natura 2000 site) for *Gobio albipinnatus* Lukasch, 1933. AACL Bioflux 2(2):147-151.

†David P., Pop A., Popovici V., 2009 Considerations upon energetic efficiency of a recirculating aquatic system (RAS) for super intensive fish culture. AACL Bioflux 2(2):153-159.

Burlacu L., Radu C. F., Sahlean T., Gavriloiae I.-C., 2009 Inter and intra specific cannibalism and aggressiveness within the *Triturus cristatus* superspecies: hungry or crowded? AACL Bioflux 2(2):161-183.

Radu C. F., Burlacu L., Gavriloiae I.-C., Sahlean T., 2009 Preliminary data on wintering habits of an intra-urban population of hybrid newts *Triturus cristatus* X *Triturus dobrogicus* (Caudata: Salamandridae). AACL Bioflux 2(2):185-196.

†Appelbaum S., Arockiaraj A. J., 2009 Cultivation of gilthead sea bream (*Sparus aurata* Linnaeus, 1758) in low salinity inland brackish geothermal water. AACL Bioflux 2(2):197-203.

Popek W., Kleczar K., Nowak M., Epler P., 2009 Heavy metals concentration in the tissues of perch (*Perca fluviatilis*) and bleak (*Alburnus alburnus*) from Czarna Orawa River, Poland. AACL Bioflux 2(2):205-208.

†Hadjinikolova L., Ivanova A., 2009 Dynamics of the level and ratio of nitrogen and phosphorus in carp ponds water: the effect of mineral fertilizers upon its quality. AACL Bioflux 2(2):209-215.

†Arteni M. O., 2009 Studies regarding some morphological features of one-summer old catfish (*Silurus glanis* Linnaeus, 1758). AACL Bioflux 2(2):217-222.

†Bura M., Szelei Z.-T., 2009 Research regarding the evolution of corporal masses and feed conversion on sterlet (*Acipenser ruthenus*) juvenile raised in recirculating system. AACL Bioflux 2(2):223-228.

†Miclăuș V., Petrescu-Mag I. V., Rus V., Cedar D., Oana L., Ober C., 2009 Presence of multinucleate giant cells in normal thymus of nutria (*Myocastor coypus*). AACL Bioflux 2(2):229-238.

Bud I., Boaru M. A., Petrescu-Mag I. V., 2009 Influence of food and age on breeding and reproductive performances in a rainbow trout population. AACL Bioflux 2(2):239-247.

† - Papers included in the official program of International Symposium ACVAPEDIA 2009

AACL Bioflux is partly supported by



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