

Cahiers d'Ethologie

a quarterly devoted to fundamental and applied, animal and human ethology
Collection Enquêtes et Dossiers : 18

Biology of the european, african and asiatic *Barbus*

par P. PONCIN, P. BERREBI, J.C. PHILIPPART et J.-CI. RUWET (editors)

Proceedings of the International Round Table *Barbus II*

organised by the University of Liège and the University of Montpellier II, the 6, 7 and 8 July 1993

CONTENTS

Historic.....	125
Introduction.....	129
Acknowledgement.....	131
Final meeting.....	132
FIRST PART : Ecology • Ethology	133
POUILLY M. and Y. SOUCHON : Physical habitat simulation of barbel (<i>Barbus barbus</i> L.) : Selection of biological models vs. prediction ability	135
BARAS E. : A biotelemetry study of seasonal variations in space utilization by the barbel, <i>Barbus barbus</i> (L.)	139
MUTAMBUE Shango : Biology and ecology of <i>Barbus holotaenia</i> fished in the Luki bassin (Zaire)	143
Poncin P. : The reproductive behaviour and hybridization of <i>Barbus barbus</i> and <i>Barbus meridionalis</i> , in aquarium	147
THOMÉ J.P., HUGLA J.L., ADAM C. and G. GOFFINET : Effects of PCB chronic contamination on liver ultrastructural morphology of the common barbel (<i>Barbus barbus</i>)	151
HUGLA J.L., THOMÉ J.P. and J.C. PHILIPPART : PCBs contamination of aquatic ecosystems related to reproductive success in a sensitive fish species, <i>Barbus barbus</i>	155
KRAIEM M.M. : Variability analysis in Barbel populations (<i>Barbus callensis</i>) of Tunisia	159
PHILIPPART J.C. : What future for the fishes of the genus <i>Barbus</i> (Cyprinidae) ?	163
KRUPKA I. et J. MESZAROS : Artificial reproduction of the barbel, <i>Barbus barbus</i> (L.)	167
PHILIPPART J.C. : Recording of a rare yellow variant of the barbel <i>Barbus barbus</i> (L.) in the River Ourthe, Belgium	169
RONCIN P. : Reproductive biology of the barbel (<i>Barbus barbus</i>) in captivity. Effects of environmental and endocrine factors	171
BARAS E. : A biotelemetry study of activity centre exploitation by <i>Barbus barbus</i> (L.) in the River Ourthe	173
Spawning strategies in an iteroparous teleost, <i>Barbus barbus</i> (L.). A synthesis	175
PIZZUL E., SALPIETRO L., SPECCHI M. and VALLI G. : <i>Barbus plebejus</i> in the basin of the Isonzo River (North-Eastern Italy) : a preliminary note	177
GERALDES A.M., COELHO M.M. and M.J. COLLALES-PEREIRA : Feeding and growth of the iberian barbel <i>Barbus bocagei</i> , STEIND 1865 in Sorraia System	179

Edited by the Laboratory for Ethology and animal Psychology

Institut de Zoologie de l'Université de Liège, Quai Van Beneden, 22, B-4020 Liège, Belgium.

Phone : 32-(0)41/66 50 81 • Fax : 32-(0)41/66 50 20

LÉONARD L. and P. PONCIN : Influence of temperature and daylength on the daily rhythms of activity in <i>Barbus barbus</i> and <i>Barbus meridionalis</i>	181	
GUEGAN J.F., PAUGY D. and C. LÉVEQUE : Study on <i>Barbus</i> in a Picador Programme : International Programme on African Cyprinids : Distribution and Origin	183	
BOUHADAD R. : Distribution of the species of the genus <i>Barbus</i> in Algeria	185	
SECOND PART : Genetic • Biochemistry • Cytology		
CASTELLI and J.C. PHILIPPART : Sex determination in the genus <i>Barbus</i> (<i>Osteichthyes, Cyprinidae</i>)	191	
RAB P., OZOUF-COSTAZ C. and P. BERREBI : Karyotypes, distribution of centromeric heterochromatin and polymorphism of NORs in <i>Barbus meridionalis</i> from Southern France and Eastern Slovakia : preliminary results.....	195	
BERREBI P. : Hybridization between French barbels <i>Barbus barbus</i> and <i>B. meridionalis</i> . Range and significance of the phenomenon	199	
CRESPIN L. and P. BERREBI : Importance of the migration in the hybrid zone of barbels, <i>Barbus barbus</i> and <i>Barbus meridionalis</i>	203	
SLECHTOVA V., SLECHTA V. and P. BERREBI : Genetic diversity of <i>Barbus</i> in Czech and Slovak rivers : preliminary results	207	
HURIAUX F., FOCANT B. and P. VANDEWALLE : The variable distribution of parvalbumin isotypes in the barbel muscles asks the question about their physiological function	211	
CASTELLI M., PHILIPPART J.C., VASSART G. and M. GEORGES : DNA fingerprint in <i>Barbus barbus</i> (<i>Osteichthyes, Cyprinidae</i>)	213	
THIRD PART : Phylogeny • Biogeography • Paleohistory		215
OSSE J.W.M., SIBBING F.A. and L.A.J. NAGELKERKE : Morphological and Ecological diversity within the <i>Barbus intermedius</i> complex of Lake Tana	217	
MACHORDOM A. and I. DOADRO : Phylogeny and taxonomy of North African Barbels	218	
MINA M., MIRONOVSKY A. & Yu DGEBAUDZE : Allometry and divergence between the large <i>Barbus</i> of Lake Tana	219	
El GHARBI S., LAMBERT A. and P. BERREBI : The genus <i>Barbus</i> (subgenera <i>Barbus</i> and <i>Labeobarbus</i>) in Morocco. Genetics and parasitology	223	
GOLUBTSOV A.S. : Biogeography of the large <i>Barbus</i> of Ethiopia with the special reference to forms of uncertain taxonomic status.....	227	
ALMAÇA C. : Studies on taxonomy, biogeography, and speciation in Euro-Mediterranean Barbels (<i>Barbus s.s.</i>)	231	
SAKSENA D.N. and M.N. VERMA : Ecodistribution of genus <i>Tor</i> and <i>Puntius</i> (<i>Cyprinidae</i>) in Madhya Pradesh, India	235	
DOBROVOLOV I. : Taxonomy of the genus <i>Barbus</i> in Bulgaria : biochemical study....	239	
FOURTH PART : Physiology • Histology • Morphology		
DARIUS H. and P. BERREBI : Asymmetry and morphological anomalies in the hybrid zone of the Lergue river (Southern France) : <i>Barbus barbus</i> x <i>B. meridionalis</i>	243	
VANDEWALLE P., FOCANT B. and F. HURIAUX : Postembryonic development of the cephalic skeleton of <i>Barbus barbus</i> (L.) (<i>Pisces, Cyprinidae</i>).	245	
THIRY M., LEPOINT A., PONCIN P. and G. GOESSENS : Ultrastructural study of the Nucleolus during the ovogenesis in an oviparous Teleost fish, <i>Barbus barbus</i> (L.)	247	
CASTELLI M., BYAMUNGO N., MOL K., KÜHN E.R. and J.C. PHILIPPART : Determination of plasma thyroidal and sexual levels in diploid and triploid common barbel (<i>Barbus barbus</i>) in relation to sexual maturation and growth.....	249	
PONCIN P. and J.-Cl. RUWET : Laboratory for Fish Ethology	253	
PHILIPPART J.C. : The fish research center of Tihange and its contribution in the study of barbels.....	255	
Program	259	
Contents	265	
List of the participants present at the Round Table	267	
Publications/Films	270	