

Waterfrogs in Wallonia : genetic identification of the introduced taxa (*Pelophylax* ssp.) and impact on indigenous waterfrogs (*Pelophylax lessonae* and *P. kl. esculentus*).

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Waterfrogs, from different origins, have been introduced in Wallonia during the last two decades, mainly as a consequence of aquatic horticulture: aquatic plants are imported from central Europe ... with eggs, tadpoles or adults of waterfrogs; the frog reproduces successfully and spread in (semi-)natural habitats. As a consequence, *P. ridibundus* has become the most frequent green frog in Brabant wallon (Percsy & Percsy, 2002a and 2002b). It is also abundant in the neighbourhood of large cities (Brussels, Liège, Namur, Verviers), (Percsy & Percsy, 2007). Actually, it is not easy to recognize the different taxa of Waterfrogs present in Wallonia. To insure their identification, we collect samples on 47 frogs from 8 different populations and submit these for enzymatic and genetic analysis. The « Laboratoire d'Ecologie des Hydrosystème fluviaux » (Prof. Joly) at the University of Lyon made protein electrophoresis and the « Museum für Naturkunde » (Prof. Plötner) in Berlin investigated mitochondrial DNA. The results of these analyses allow to obtain : 1.a validation of the identification method of the taxa on the field and, thus, a reliable follow of the evolution of the populations; 2.the determination of the geographic origin of the introduced frogs; 3.the evidence of hybridization and/or introgression between *Pelophylax ridibundus* and the indigenous frogs *P. lessonae* and *P.kl.esculentus*; this result corroborates recent similar observations made in other European countries.

Percsy C. & Percsy N. (2002a) : Dix ans de suivi des populations indigènes et introduites de grenouilles « vertes » (*Rana (Pelophylax) ssp.*, Anura, Ranidae) dans le bassin de la Lasne (Brabant wallon, Belgique). Bulletin de la Société Herpétologique de France n° 103 : 59 - 72.

Percsy C. & Percsy N. (2002b) : Evolution des populations indigènes et introduites de grenouilles « vertes » en Brabant wallon. Pages 213 – 218 in Peeters M. & J.L. Van Goethem (éds) (2002) : Belgian fauna and alien species. Actes du symposium : Faune belge : statut et tendances observées avec une attention particulière pour les espèces exotiques. Bulletin de l'I.R.S.N.B., Biologie 72, supplément, 297 pages.

Percsy C. & Percsy N. (2007). Quatre chapitres sur les grenouilles vertes in Jacob J.P. et al., Amphibiens et reptiles de Wallonie. Aves-Raîenne et CRNFB, série « Faune-Flore-Habitats » n°2. Namur, 384 pages.

Percsy C. & Percsy N. (2009). Identification des grenouilles « vertes » (*Pelophylax*) en Wallonie : résultats de la confrontation de critères morphologiques et acoustiques avec des analyses enzymatiques et d'ADN (à paraître).