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- Jomoc D. J. G., Flores R. R. C., Nuneza O. M., Villanueva R. J. T., 2013 Species richness of Odonata in selected wetland areas of Cagayan de Oro and Bukidnon, Philippines. *AACL Bioflux* 6(6):560-570.
- Ipinjolu J. K., Abubakar M. Y., Magawata I., Buko M. I., 2013 Reproductive, survival and growth performance of intergeneric cross of Exotic Dutch Clarias, *Heterobranchus bidorsalis* and *Heterobranchus longifilis* in Sokoto North-West Nigeria. *AACL Bioflux* 6(6):571-581.
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- Oroian T. E., Cighi V., Oroian R. G., Gavrila V., 2013 Chemical composition of spawns and carp milt in *Cyprinus carpio* populations from Arinis fishery complex, Maramures area. *AACL Bioflux* 6(6):614-617.
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