Dear Editor,

Mosquitofish (Gambusia sp.) have had the greatest ecological impact by far of any of the introduced poeciliids. *Gambusia affinis* is marked one of 100 of the World's Worst Invasive Alien Species. *G. affinis* is closely related to he eastern mosquito fish (*G. holbrooki*), which was formerly classed as a sub-species. Their appearance, behaviour and impacts are almost identical, and they can therefore be treated the same when it comes to management techniques Because of their aggressive and predatory behavior, mosquitofish may negatively affect populations of small fish through predation and competition and zoooplantion. *Gambusia holbrooki* was first introduced to Spain and from there to Italy. *G. affinis* (*G. patruelis*) was  introduced in Italy and Croatia because they were supposed to resist cold weather better than *G. holbrooki*.

In this paper is plotted together to get the overall distribution of Gambusia sp. in Croatia and Bosnia and Herzegovina. Samples collected across this range were meristicaly and geneticaly analysed and only presence of*G. holdbrooki* was confirmed, represented with two different haplotypes already known from other parts of Europe.

The manuscript has neither been submitted nor published elsewhere, all authors agree to submitt the manuscript for publication to Periodicum Biologorum and pay any charges if their manuscript is accepted for publication.

Kind regards,

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