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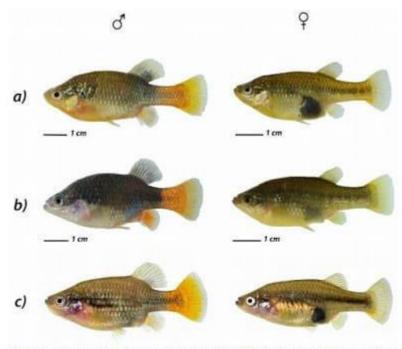


FIGURE 5. a) Xemotoca doudrioi, Holotype male CPUM-9589 and female from San Sebastian b) Xemotoca lyonoi, Holotype male CPUM-9590 and female from Tamazala c) Xemotoca eiseni, male and female from Compostela population picture by Wolfgang Gesal www.pisces.at

Xenotoca doadrioi & X. Iyonsi • Two New Species of the Genus Xenotoca Hubbs and Turner, 1939 (Teleostei, Goodeidae) from central-western Mexico

Xenotoca doadrioi & X. lyonsi

Domínguez-Domínguez, Bernal-Zuñiga, & Piller, 2016
FIGURE 5. a) *Xenotoca doadrioi*, Holotype male CPUM-9589 and female from San Sebastian
b) *Xenotoca Iyonsi*, Holotype male CPUM-9590 and female from Tamazula
c) *Xenotoca eiseni*, male and female from Compostela population picture by Wolfgang Gessl [www.pisces.at]

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Abstract

The subfamily Goodeinae (Goodeidae) is one of the most representative and well-studied group of fishes from central Mexico, with around 18 genera and 40 species. Recent phylogenetic studies have documented a high degree of genetic diversity and divergences among populations, suggesting that the diversity of the group may be underestimated. The species *Xenotoca eiseni* has had several taxonomic changes since its description. *Xenotoca eiseni* is considered a widespread species along the Central Pacific Coastal drainages of Mexico, inhabiting six independent drainages. Recent molecular phylogenetic studies suggest that *X. eiseni* is a species complex, represented by at least three independent evolutionary lineages. We carried out a meristic and morphometric study in order to evaluate the morphological differences among these genetically divergent populations and describe two new species. **The new species** of goodeines, *Xenotoca doadrioi* and *X. lyonsi*, are described from the Etzatlan endorheic drainage and upper Coahuayana basin respectively.

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