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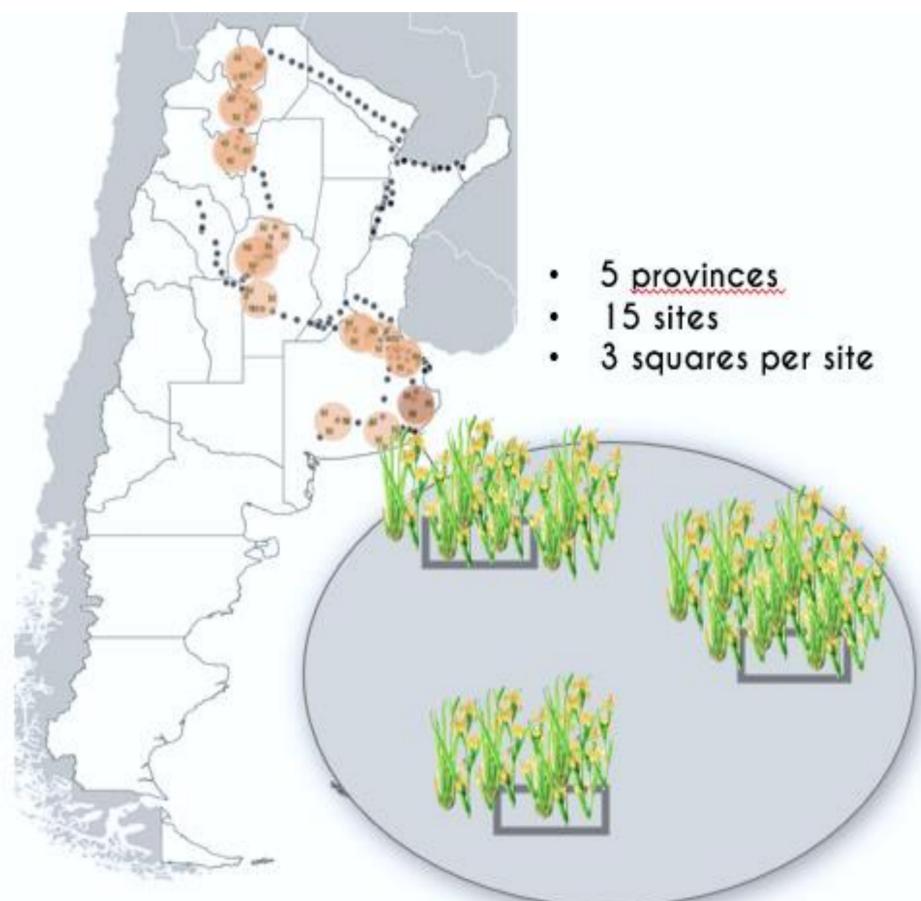
## INTRODUCTION

*Iris pseudacorus* L. (Iridaceae) (yellow iris) is an invasive alien species (IAS) native to Europe, North Africa, and West Asia. This species not only causes economic impacts by invading rural and urban areas, but also produces a great damage to wetland's native biodiversity in many countries of the world. Currently, there is an international alliance between Argentina, South Africa, Belgium and New Zealand, aimed at testing the feasibility of applying classical biological control against this weed with the candidate *Apthona nonstriata*, native to Europe. However, there are still no assessments of herbivorous insects already associated with *I. pseudacorus* in the invaded range. The aim of this study is to analyze the biodiversity of insect assemblages associated with the invasive alien plant *I. pseudacorus* in Argentinian wetland. Knowledge about the composition of insects associated with this plant in the introduced range is necessary to elucidate whether this exotic species is, in the invaded range, released from its associated natural enemies by coevolution, and whether there is absence or presence of new associations between this species and herbivorous insects native to the invaded range

## METHODS

Systematic and random samplings were carried out in urban, rural, natural and artificial invaded wetlands, in the Pampean, Central and Northwest regions of Argentina (Fig. 1), taking into account aerial parts of plants and capsules. Insects were removed from the plant and placed in vials with alcohol. Likewise, capsules were collected to be dissected in the laboratory

Fig. 1. Sampling sites across Argentina



## RESULTS AND DISCUSSION

As preliminary results, 343 individuals corresponding to 11 orders were obtained, Hemiptera, Diptera and Coleoptera as the most abundant (Fig. 2). The most represented species of herbivorous insects belonged to the families Aphididae, Pentatomidae and Curculionidae (Fig. 2). Several coleopteran species were recorded feeding on seeds inside the capsules, among which *Araecerus fasciculatus* was the most represented. Most of the specimens were considered occasional visitors, as they were found only once on *I. pseudacorus*. Regarding the herbivorous insects found more than once, all of them were polyphagous species without potential for biocontrol.

Fig. 2 Abundance of insects collected from *I. pseudacorus* in Argentina

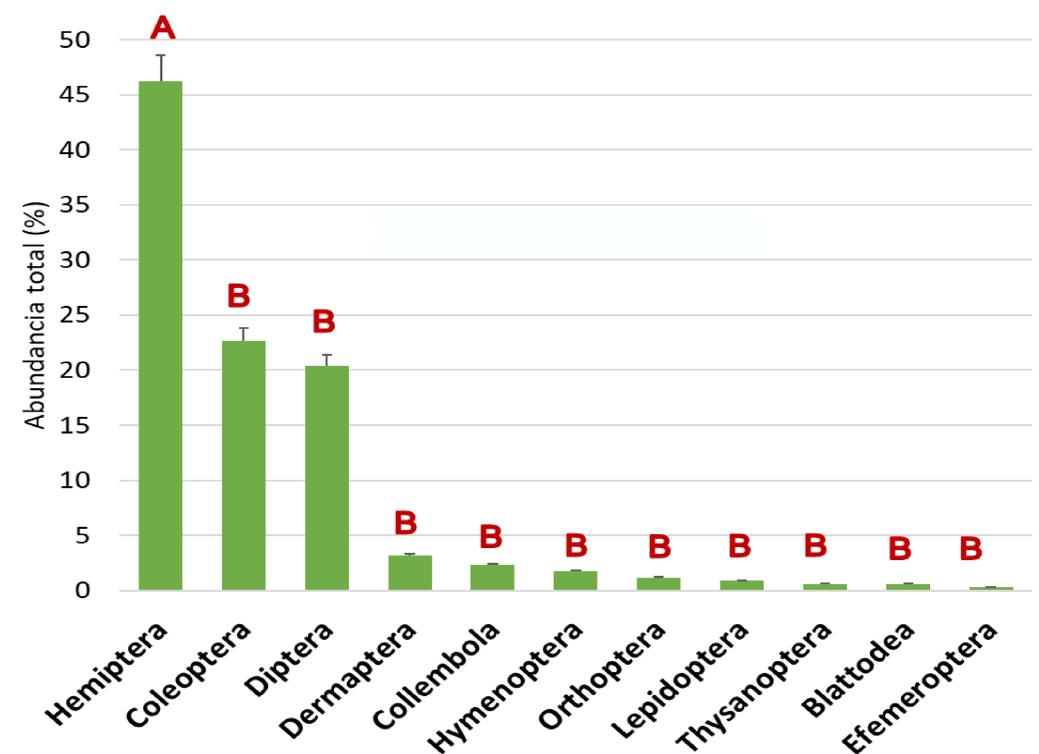


Fig. 3. Coleoptera species feeding and developing in *I. pseudacorus* seeds



## CONCLUSION

The results indicate an absence of species with biocontrol potential for *I. pseudacorus* in the sampled sites. Although herbivorous insects were recorded on the plant, many of them can be attributed to occasional visits due to their low representation. The most represented species were polyphagous species, and cannot be considered for local weed biocontrol. These results emphasize the need to continue testing the feasibility of applying classical biocontrol with candidates from the native range of the plant that demonstrate specificity for *I. pseudacorus*.