

## Practice Abstract N° 32

Invasive traits and competitive ability of the alien weed *Oxalis pes-caprae*

## INTRODUCTION

*Oxalis pes-caprae* (common name Bermuda buttercup) is a highly invasive perennial herb belonging to the Oxalidaceae family. Native to South Africa, it was introduced as an ornamental plant in Mediterranean climatic areas of the world, including the Mediterranean basin itself since the early 1800s, becoming a widespread and problematic weed.

*Oxalis pes-caprae**Oxalis pes-caprae* bulbs

It prefers disturbed habitats such as agroecosystems (agricultural fields, non-cultivated olive groves, orchards, vineyards, gardens, roadsides, and abandoned land); it can also colonize natural and semi-natural ecosystems, posing a threat to native biodiversity and it can be toxic to grazing animals. The success as an invasive species is largely attributed to its prolific production of propagating organs: bulbs.

## MAIN RESULTS – OUTCOMES

At the end of spring, each plant can produce up to 50 bulbs, which may be located in soil layers at different depths. In winter, more than 500 plants per square meter can be found. First of all, it's crucial not to facilitate the spread of this species in areas that are not yet infested by preventing bulbs transportation and movements. Based on the information received and the observations made in the Sardinian living lab, great attention must therefore be paid.

## PRACTICAL RECOMMENDATIONS

It is absolutely necessary to avoid:

- the introduction of plant propagation material contaminated by bulbs (e.g., woody plants with root balls from nurseries, ornamental plants, etc.),
- the movement of soil, debris, etc., from contaminated areas,
- the use of agricultural equipment and earth-moving machinery not completely devoid of bulbs in areas where this weed is not yet present.

