

## REPORT OF THE EXPEDITION:

### MONITORING ORCHID POPULATIONS IN THE MARINA REGION (SOUTH EAST OF SPAIN) EDITION 2015

The surveys carried out in the 6<sup>th</sup> Edition of Volunteering for Monitoring Populations of Orchids took place during the months of March, April and September and were short surveys which had the participation of local volunteers.

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All activities are part of the *Proyecto de Colaboración con el Servicio de Vida Silvestre* (Dirección General de Medio Natural y Evaluación Ambiental) of the Valencian Government. The results of the studies and the findings have been reported to the agency.

This report shows our activities during these surveys as well as brief comments about the outcomes and discoveries obtained which are much more important than we expected.

#### FIELD WORK PLACES

The environments visited were abandoned traditional fields in littoral environments with thermic vegetation under drought conditions. Short herbs and grasses and perennial species of grasses-thickets (*Brachypodium* sp. and *Thymus* sp.) are the main landscape edificators.



*Abandoned traditional fields*





*Volunteers collecting data at Plot 1*



*Volunteers collecting data at Plot 2*



*After work*

## DESCRIPTION OF THE WORK UNDERTAKEN

The field work developed during the Expedition was structured as follows:

### - Study of populations of *Himantoglossum robertianum* y *Ophrys scolopax* in Xàbia

This population study was focussed on population counts of both species on two plots in the Tarraula area (Xàbia) although data was also taken of the phenology of the plant, number of flowers, height, largest diameter of the rosette, the number of fertilised flowers and other species of orchids which appeared in smaller numbers. Also listed were the following: location, date, GPS location, altitude, soil substrate, the aspect of the abandoned traditional fields, vegetation, bioclimate and disturbances.

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*H. robertianum*



*O. scolopax*

The following table shows the population count in each plot:

	<i>H. robertianum</i>	<i>O. scolopax</i>
<b>Plot 1</b>	<b>98</b>	<b>42</b>
<b>Plot 2</b>	<b>68</b>	<b>13</b>

Plot 1 shows a high number of the species *Ophrys speculum*. Examples of *Ophrys apifera* and *Ophrys tenthredinifera*, were also seen, but in lower numbers.



In both plots it was observed that most of the flowers of *H. robertianum* had been fertilised.

### - Location and study of new populations of different species of orchids in Marina Alta Region

In plot 1 of the previous section we discovered a new population unseen before: *Ophrys x castroviejoii*, a hybrid with just 5 known populations in the Iberian Peninsula. In the population discovered in our expedition a total of 10 specimens were counted.

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*Ophrys x castroviejoii*

## RESULTS

The main results from the 2015 Orchid Volunteering Expedition are:

- We found and recorded far more specimens of orchid than we expected.
- The field methodology revealed to be very effective. We kept improving and performing the methodology as we saw what worked in the field, and what didn't.
- Land use change affects both the distribution and abundance of orchid species more than expected.
- We discovered a new population of *Ophrys x castroviejoii* in the Iberian Peninsula

- We possibly found a new population of *Spiranthes spiralis* in Xàbia. The location will be notified to *Servicio de Vida Silvestre* (Wild Life Service) for their confirmation.
- The volunteers showed great interest in the surveys and expressed their intention to participate in future expeditions to monitor the populations studied. We want to thank everybody who came to experience this with us and we are really happy to invite you to share this adventure next spring.

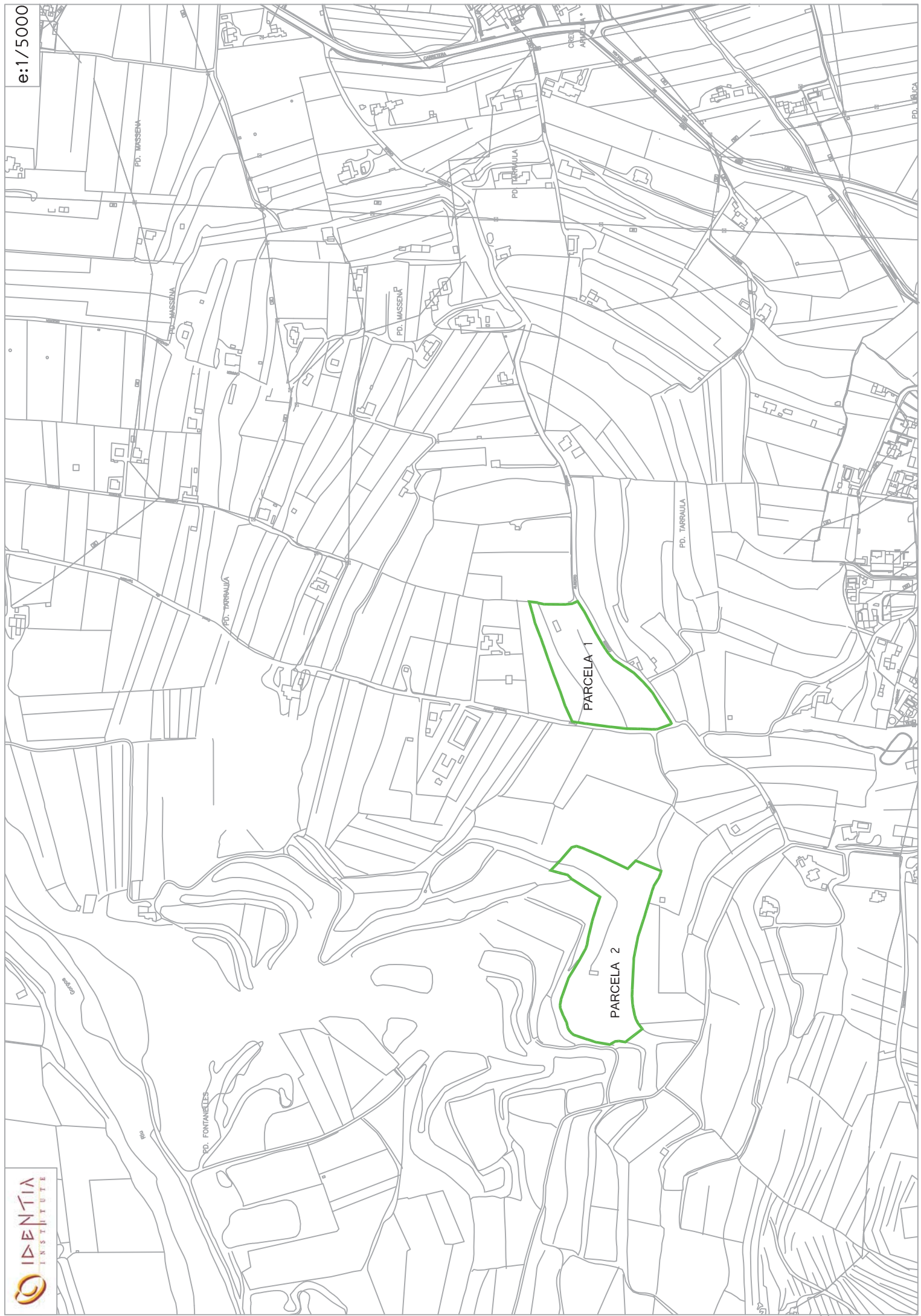
## BIBLIOGRAPHY

LOWE, M. R.; PIERA, J.; CRESPO, M. B. (2001): "*The orchids of the Province of Alicante (Comunidad Valenciana), Spain: a contribution to the OPTIMA project*", Journal Europäischer Orchideen, vol. 33, pp. 525–635.

LAGUNA *et al.* (2001): "*Orquídeas silvestres de la Comunidad Valenciana*", Generalitat Valenciana-Conselleria del Medio Ambiente.

PIERA, J; CRESPO, M. B.; LOWE, M. R (2003): "*Las orquídeas de la Provincia de Alicante*", Instituto Alicantino de Cultura Juan Gil-Albert, Diputación Provincial de Alicante.

SERRA, L; SOLER, J.X. (2012): "*Anales del Jardín Botánico de Madrid*, vol. 69, núm. 2, pp. 237-242. Consejo Superior de Investigaciones Científicas, España.

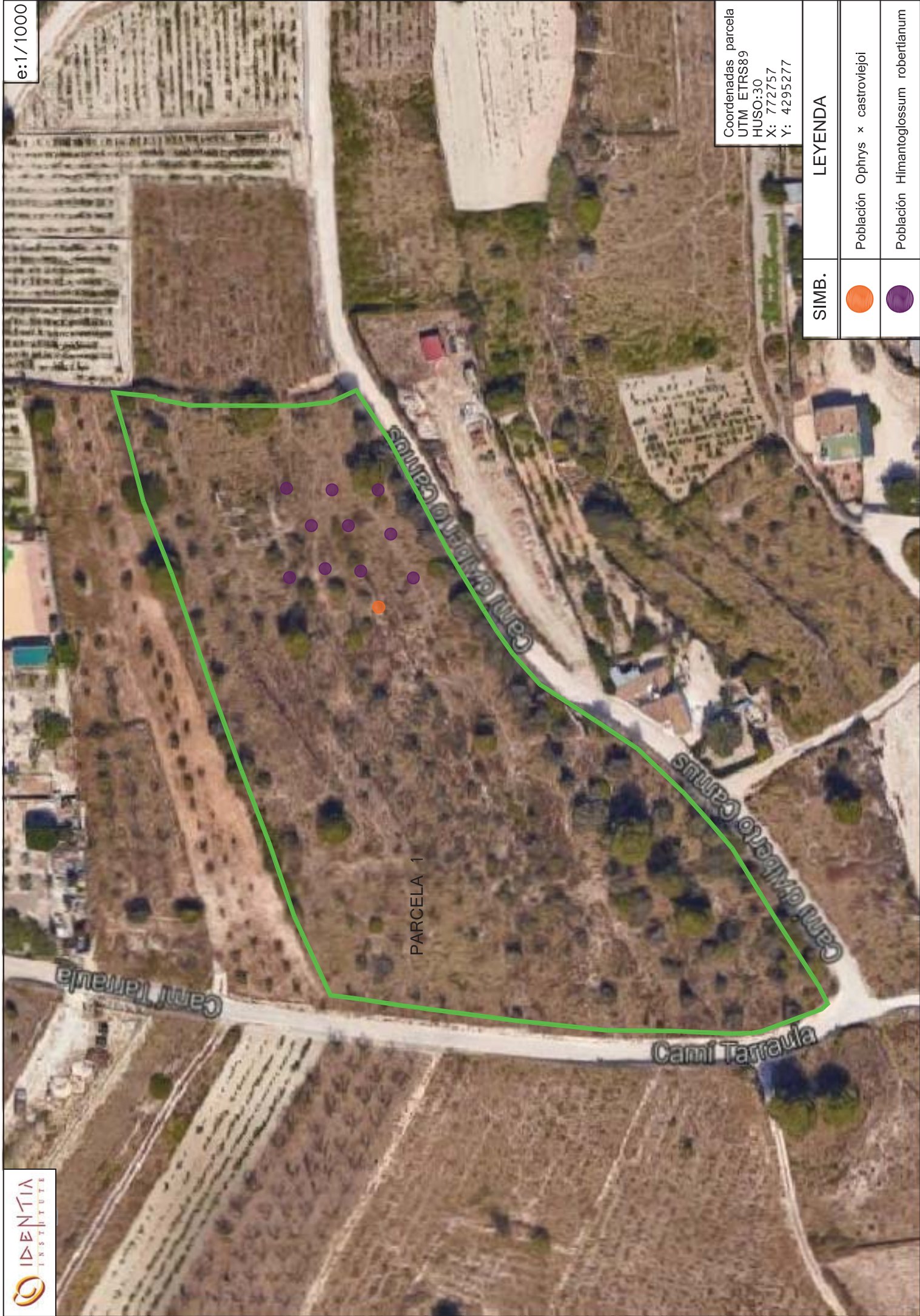





Coordenadas parcela  
UTM ETRS89  
HUSO:30  
X: 772757  
Y: 4295277

SIMB.	LEYENDA
	Población Ophrys x castroviejae
	Población Himantoglossum robertianum

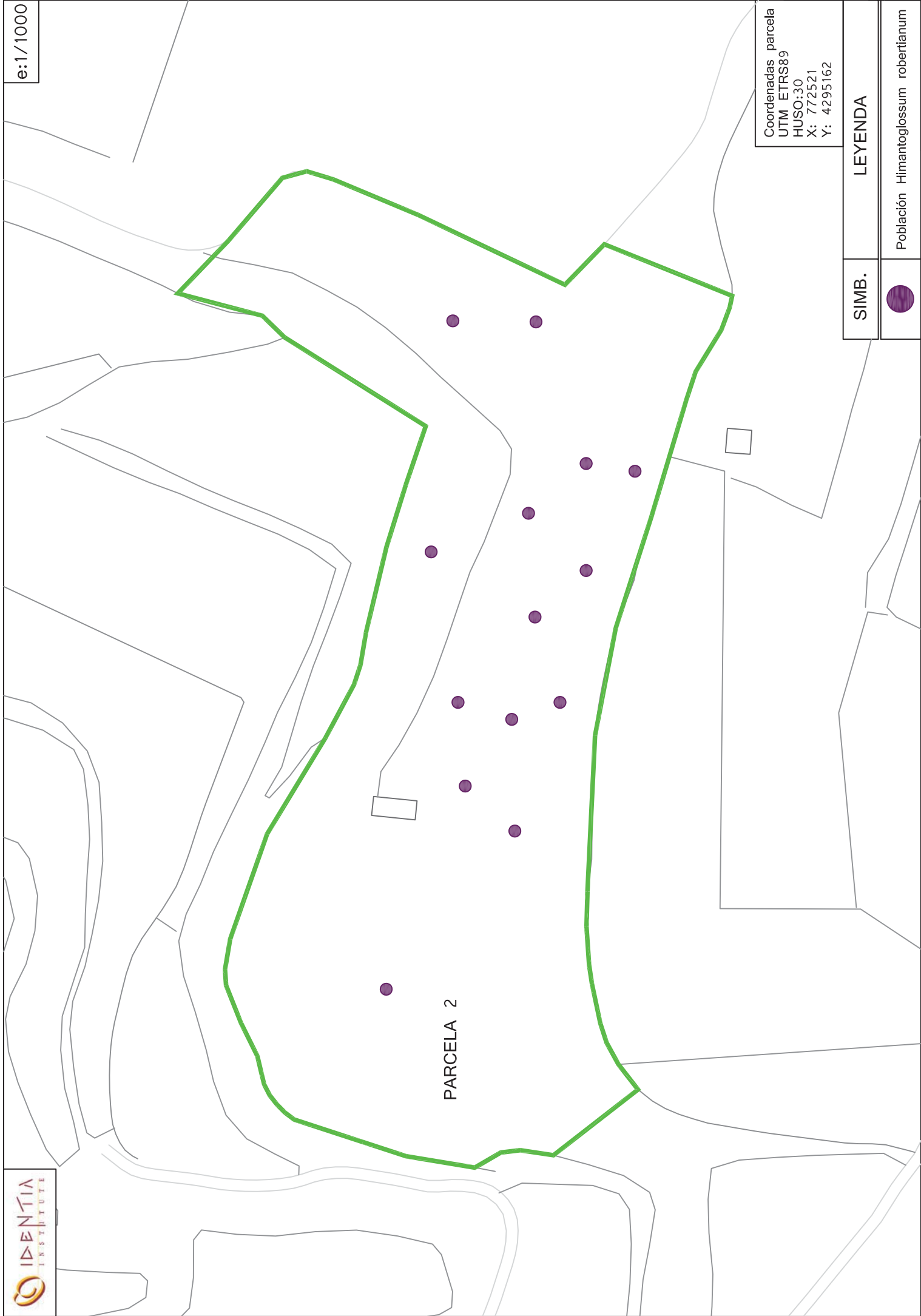




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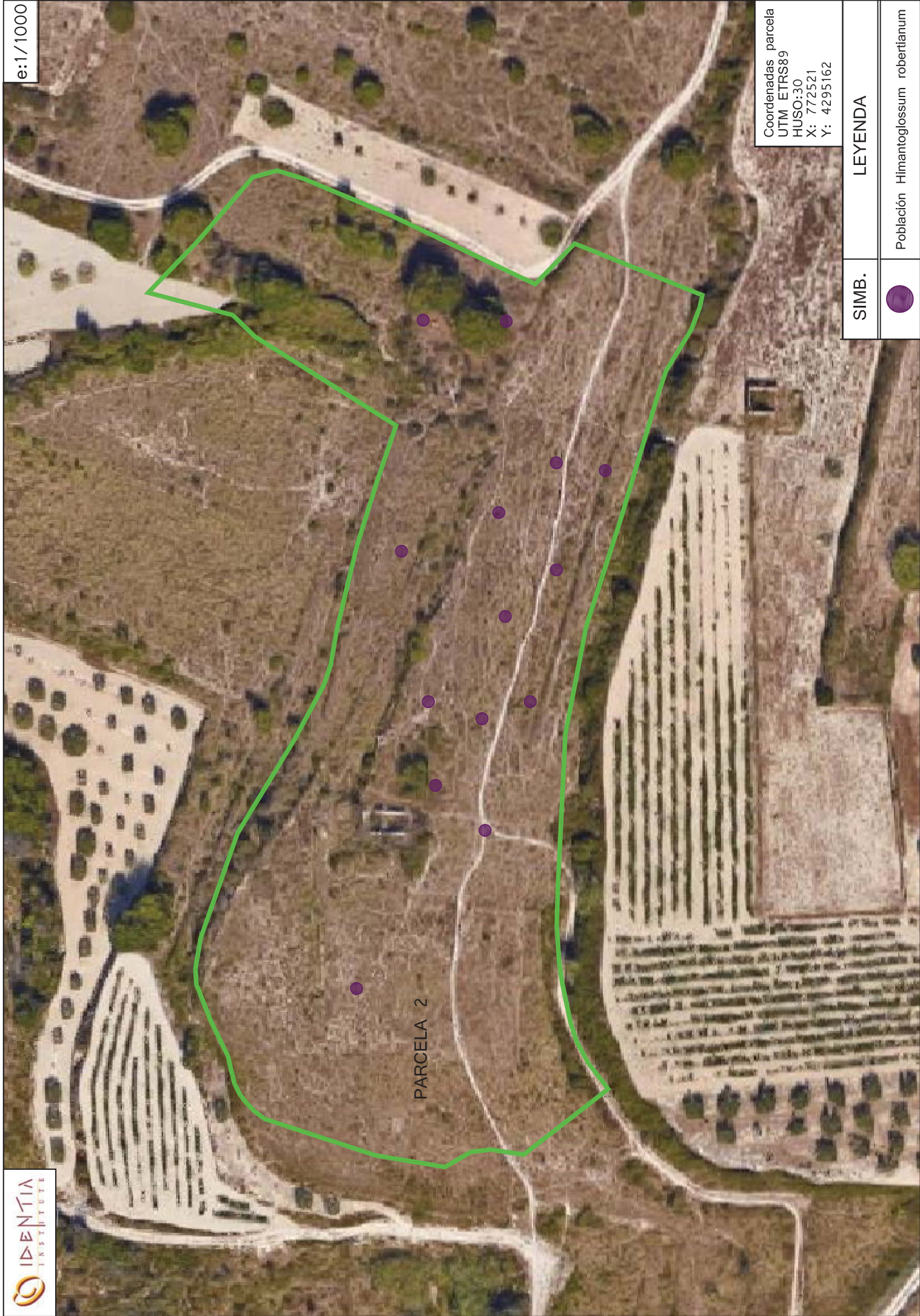
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