#### Exploration and Capturing *Brassica* Wild Relatives Diversity in the Ionian coast area of Valona, Albania

(I would like to thank the Association of Organic Agriculture and the Agency of Protected Areas in Valona for their contribution to this cooperation)



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#### **Brassica sp – Species according to the Albanian flora list**



- Brassica incana Ten.(Red List VU A1b)
  Balkan sub endemic;
- Brassica cretica Lam. (Sub endemic);
- Brassica oleracea L.
- *Brassica nigra* (L.)Koch.
- Brassica rapa L.
- Brassica napus L. var. oleifera DC.

#### Field monitoring of *Brassica* species



- Establishment of a group of collaborators;
  Knowledge of *Brassica* sp and their habitat.
  Preparation of a monitoring protocol.
  Selection of polygons (in sites).
  Field data collection (Coordinates, field pedology, plant development stages, plant biometrics, etc.);
- Sampling (plants, leaves and seeds);



Perimetro ①







Perimetro ⑦ 5,26 km <del>\*</del> Area 270.836 m<sup>2</sup> <del>\*</del>







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#### Monitored areas

- Bay of Vlora;
- Zvernec Hills;
- Karaburuni Peninsula;
- Sazani Island;
- Bay of Gjipea;
- Bay of Himara;
- Porto Palermo area;
- Total:118 km of coastline;
- And 11km around the island of Sazani;

#### Map of the presence of *Brassica sp.*



- Bay of Vlora (Castle-Orikum-Saint Vasil);
- PK Marine: Karaburun Sazan (Saint Vasil Palace);
- Ionian Coast (Palace Himare Porto Palermo);
- ➤Sazan Island;

#### **Intensity of spread in grown territories**



- Brassica sp are a very rare spread. It is installed on rocky sites, fragmentarily located from the Castle in Vlora to Porto Palermo; in small numbers located along the entire Karaburun Peninsula up to Porto Palermo.
- The best situation is in the island of Sazan, where *Brassica* sp is found in larger fires and in the form of meadows (30-40 plants per 100 m2.

### **Pressures and threats**



- Damages from livestock grazing;
- Urban and tourist constructions in coastal areas;
- Reconstruction works of the highway Vlora Orikum;
- Climate changes.

## Evaluation for each species (distribution, plant associations)



- Diversity of *Brassica* species
  (*B.incana*, *B.cretica*, *B.villosa*)
- No. of plants for a given area;
- Associations of *Brassica* sp., With
  Daucus carota and Salvia officinalis;





# Awareness meetings with land users and livestock of the area



- Meetings with residents of the Dukati area, regarding the recognition or possible use of *Brassica* sp, as food and livestock feed.
- Meetings with farmers and ranchers of Karaburun area;
- Meetings with agronomist and forestry specialist of Vlora region

### **Conclusions and recommendations**





#### Brassica incana





View on www.iucnredlist.org

Citation: Kell, S.P. 2013. Brassica incana. The IUCN Red List of Threatened Species 2013: e.T170106A6715911. http://dx.doi.org/10.2305/IUCN.UK.2011-1.RLTS.T170106A6715911.en

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- In-depth knowledge and analysis of the situation of species, accompanied by their genetic analysis.
- Collecting and monitoring of at least 10 accessions of *Brassica* wild relatives populations
- Mapping of Brassica sp (GIS)
- Analysis of pressures, threats.
- Proposal for inclusion in the Red List and two other species.
- Establishing field/greenhouse collection(s) of gathered CWRs populations and their regeneration ;
- Description of morphological traits using the same descriptors
- Selection of accessions for inclusion in AEGIS;

## Thank you

