Utilisation: a defining characteristic of crop wild relatives

A defining attribute of a CWR is its utilisation. This can be direct, for example as wild salad, or indirect, as potential breeding material for the target crop. The relationship of the CWR to the associated crop is therefore an essential piece of information that is included in the CWRIS descriptors. The information given under taxon utilisation is shown (below) for Beta vulgaris subsp. maritima (L.) Arcangeli, wild or sea beet (Data: L. Frese).

<table>
<thead>
<tr>
<th>Used/Ethnobotany</th>
<th>Gene source: disease resistance genes; food: leaf vegetable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target crop</td>
<td>Sugar beet</td>
</tr>
<tr>
<td>In breeding programmes</td>
<td></td>
</tr>
<tr>
<td>Degree of relationship to crop</td>
<td>Primary gene pool</td>
</tr>
</tbody>
</table>
Threats are documented at two levels in CWRIS: for the taxon across its whole distribution or for a population of the taxon at a specific location. The threats are categorised according to the IUCN Threat Authority File.

The example of Arnica montana L. (above) has multiple entries for taxon threat: the data for Norway provided by A. Asdal, for Lithuania by J. Labokas. For in situ conservation management of threatened species it is crucial to know the local threats to a particular population. The species illustrating this is the Western European maritime endemic Asparagus officinalis subsp. prostratus (Dumort) Corb. Local threats to this species at a particular site, Port Eynon, Wales, are shown in the box below (Source: Rich et al. 2002). The same IUCN threat standards are used here to classify the local threats.

### Site location information

The example (top right) shows three of the site locations in the Czech Republic, where the near-threatened Allium schoenoprasum subsp. sibiricum (L.) Richter occurs.

In addition to location details, the webpage with the overview of the site locations gives the original source of the data: in this case the Czech National Phytosociological Database, made available by Z. Stehno. In the Site location table, for each location, habitat type, vegetation types and soil information are documented as shown (bottom right) for a site near Cañamares, Spain, one of a total of two locations of the Spanish endemic Erodium paularense Fern. Gonz. & Izco. The total population of this endangered species is 200,000 plants, divided over 5 populations. (Data by J. Iriondo)

### Population information

For every site location, the population should be documented for population size, population structure and dynamics, population management, etc. For some species this level of detail is available. The population dynamics data shown below were part of the preparation of the UK Biodiversity Action Plan for Asparagus officinalis subsp. prostratus (Dumort) Corb., which is known to have 28 populations in the UK and a total population size of only 1200 plants (Rich et al. 2002).

### References


www.pgrforum.org