

Descriptors for uploading *in situ* CWR passport data to EURISCO

2024-01-04

1 Introduction

This descriptor list describes the data exchange format for uploading passport data from the National Inventories for *in situ* CWR to EURISCO.

The descriptors in this list are a selection from those of the *ex situ* format for upload, with the addition of a few. In case the descriptor name or description is deviating from the *ex situ* upload format, this is indicated in the description.

A significant departure from the *ex situ* data exchange format is the concept of an *in situ* CWR population being an accession. As a result, the population identifiers becomes the ACCNUMB in EURISCO, and the managing institute code and name the INSTCODE/INSTNAME, respectively.

The mandatory fields are, similarly to the *ex situ* upload format, NICODE, INSTCODE, ACCNUMB and GENUS. The combination of these fields has to be unique.

2 General formatting rules

The general formatting rules that apply to the *ex situ* data also apply to the *in situ* data:

- If a field allows multiple values, these values should be separated by a semicolon (;) without space (e.g. Accession name: Symphony;Emma;Songino).
- A field for which no value is available should be left empty (e.g. Elevation). If data are exchanged in ASCII format, a field with a missing numeric value should be left empty. If data are exchanged in a database format, missing numeric values should be represented by generic NULL values.
- Dates are recorded as YYYYMMDD. If the month or day is missing, this should be indicated with hyphens or '00' [double zero]. If both (month and day) are missing, two double zeros are needed (e.g. 19750000; 197506--, 19750600).
- Country names: Three-letter ISO codes are used for countries. The ISO 3166-1 standard country or area codes are available online at: <https://unstats.un.org/unsd/methodology/m49/>. **Note:** The list of obsolete codes can be found at: http://en.wikipedia.org/wiki/ISO_3166-1_alpha-3#Reserved_code_elements.
- For institutes, the codes from FAO WIEWS should be used. The current set of institute codes is available from the FAO WIEWS site (<http://www.fao.org/wiews>).
 - If new institute codes are required, they can be generated online by FAO National Focal Points (<http://www.fao.org/agriculture/crops/thematic-sitemap/theme/seeds-pgr/gpa/national-focal-points/en/>) or they can be requested from: WIEWS@fao.org.
 - In case no FAO WIEWS code of the institution responsible for, and/or organization that manages the CWR population is available and cannot be generated, the code ('DUMMY') can be used.
 - For institutes that no longer exist, or that were not assigned a FAO WIEWS institute code, please provide full details in the descriptors INSTNAME and LIAISONNAME, respectively.

3 Descriptors

EURISCO <i>IN SITU</i> CWR DESCRIPTORS	
<p>1. National Inventory code</p> <p>Code identifying the National Inventory; the Three-letter ISO 3166-1 code of the country preparing the National Inventory. Exceptions are possible if agreed with EURISCO, such as NGB.</p> <p>Example: NLD</p>	<p>(NICODE)</p>
<p>2. Persistent unique identifier</p> <p>Any persistent, unique identifier assigned to the accession so it can be unambiguously referenced at the global level and the information associated with it harvested through automated means. Report one PUID for each accession.</p> <p>The Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture (PGRFA) is facilitating the assignment of a persistent unique identifier (PUID), in the form of a DOI, to PGRFA at the accession level (http://www.fao.org/plant-treaty/areas-of-work/global-information-system/DOI/en/).</p> <p>Note: This descriptor should be assigned only to those CWR populations that the National Focal Point considers as long-term available sources of germplasm (e.g. the population is being monitored and potentially available under the terms of the MLS).</p>	<p>(PUID)</p>
<p>3. Institute code</p> <p>FAO WIEWS code of the institution responsible for, and/or organization that manages the CWR population (e.g. protected area authority, nature reserve manager, national park manager, private landowner, etc.). The codes consist of the Three-letter ISO 3166 country code of the country where the institute is located plus a number (e.g. COL001). The current set of institute codes is available from http://www.fao.org/wiews. For those institutes not yet having a FAO WIEWS code, or for those with 'obsolete' codes, see section '<i>General formatting rules</i>'.</p> <p>NOTE: This description deviates from the <i>ex situ</i> upload format.</p>	<p>(INSTCODE)</p>
<p>4. Institute name</p> <p>Name and short address of the organization that manages the CWR population (e.g. protected area authority, nature reserve manager, national park manager, private landowner, etc.). This descriptor should be used only if INSTCODE has the value 'DUMMY' because the FAO WIEWS code for this institute is not available.</p> <p>NOTE: This descriptor is new and did not occur in the <i>ex situ</i> EURISCO format yet.</p>	<p>(INSTNAME)</p>

5. Accession number	(ACCENUMB)
<p>This is the unique identifier for CWR populations maintained <i>in situ</i> and is assigned by the organization managing the population.</p> <p>NOTE: This description deviates from the <i>ex situ</i> upload format.</p>	
6. Liaison institute code	(LIAISONCODE)
<p>FAO WIEWS code of the institution that can liaise between the organization managing the CWR population and the interested user.</p> <p>NOTE: This descriptor is new and did not occur in the EURISCO <i>ex situ</i> format yet.</p>	
7. Liaison institute name	(LIAISONNAME)
<p>Name, and brief address, of the institution that can liaise between the organization managing the CWR population and the interested user.</p> <p>NOTE: This descriptor is new and did not occur in the EURISCO <i>ex situ</i> format yet.</p>	
8. Genus	(GENUS)
<p>Genus name for a taxon. Initial uppercase letter required.</p>	
9. Species	(SPECIES)
<p>Specific epithet portion of the scientific name in lowercase letters. Only the following abbreviation is allowed: 'sp.'</p>	
10. Species authority	(SPAUTHOR)
<p>Provide the authority for the species name.</p>	
11. Subtaxon	(SUBTAXA)
<p>Subtaxon can be used to store any additional taxonomic identifier. The following abbreviations are allowed: 'subsp.' (for subspecies); 'var.' (for variety); 'f.' (for form).</p> <p>NOTE: The description was slightly modified as cultivar groups cannot occur in CWR populations.</p>	
12. Subtaxon authority	(SUBTAUTHOR)
<p>Subtaxon authority at the most detailed taxonomic level.</p>	
13. Observation date [YYYYMMDD]	(ACQDATE)
<p>The most recent date the population was observed, where YYYY is the year, MM is the month and DD is the day. Missing data (MM or DD) should be indicated with hyphens or '00' [double zero].</p> <p>NOTE: The name and description of this descriptor have been changed to apply to <i>in situ</i> CWR.</p>	
14. Country of occurrence	(ORIGCTY)
<p>Three-letter ISO 3166-1 code of the country where the CWR population was observed or inventoried.</p> <p>NOTE: The name and description of this descriptor have been changed to apply to <i>in situ</i> CWR.</p>	
15. Location of occurrence site	(COLLSITE)
<p>Location information below the country level where the population sample was observed. This might include the distance in km and direction from the nearest town, village or map grid reference point (e.g. 7km east of Wageningen in the province of Gelderland).</p> <p>NOTE: The name and description of this descriptor have been changed to apply to <i>in situ</i> CWR.</p>	

16. Latitude of occurrence site		(DECLATITUDE)
	Latitude expressed in decimal degrees. Positive values are north of the Equator; negative values are south of the Equator (e.g. -44.6975).	
	NOTE: The name of this descriptor has been changed to apply to <i>in situ</i> CWR. The accuracy of this information that is going to be disseminated may be adjusted as considered appropriate by each country.	
17. Longitude of occurrence site		(DECLONGITUDE)
	Longitude expressed in decimal degrees. Positive values are east of the Greenwich Meridian; negative values are west of the Greenwich Meridian (e.g. +120.9123).	
	NOTE: The name of this descriptor has been changed to apply to <i>in situ</i> CWR. The accuracy of this information that is going to be disseminated may be adjusted as considered appropriate by each country.	
18. Coordinate uncertainty [m]		(COORDUNCERT)
	Uncertainty associated with the coordinates in metres. Leave the value empty if the uncertainty is unknown. Can also be used to indicate the size of the distribution area of the CWR.	
	NOTE: The description of this descriptor has been changed to apply to <i>in situ</i> CWR. The coordinate uncertainty should be adjusted if the accuracy of the geographic coordinates is reduced.	
19. Elevation of site [masl]		(ELEVATION)
	Elevation of site expressed in metres above sea level. Negative values are allowed.	
20. Status of occurrence site		(POPSRC)
	Habitat of the occurrence site of the population(s).	
	The coding scheme can be applied either by using the general codes (in boldface) or the more specific codes. Multiple values are separated by a semicolon without space.	
	<p>10: Wild</p> <ul style="list-style-type: none"> 11: Forest or woodland 12: Shrubland 13: Grassland 14: Desert or tundra 15: Aquatic habitat <p>20: Farm or cultivated area</p> <ul style="list-style-type: none"> 21: Field 22: Orchard 23: Backyard, kitchen or home garden 24: Fallow land 25: Pasture 28: Park <p>60: Weedy, disturbed or ruderal habitat</p> <ul style="list-style-type: none"> 61: Roadside 62: Field margin <p>99: Other (elaborate in REMARKS field)</p>	
	NOTE: This descriptor is new and did not occur in the EURISCO <i>ex situ</i> format yet.	

21. Site protection **(SITEPROT)**

Indicate whether the site is protected under any legal or official protection. Multiple values are separated by a semicolon without space.

- 0: not protected
- 1: strict nature reserve
- 2: wilderness area
- 3: national park
- 4: natural monument or feature
- 5: habitat/species management area
- 6: protected landscape/seascape
- 7: protected area with sustainable use of natural resources.
- 8: other effective conservation measures (OECM)

NOTE: This descriptor is new and did not occur in the EURISCO *ex situ* format yet.

22. Conservation actions in place **(CONSACTION)**

Indication whether conservation actions related to the population are in place. Use the IUCN classification scheme for conservation actions in place. Multiple values are separated by a semicolon without space.

- 0: No conservation actions
- 1: Monitoring and Planning
- 2: Land/Water Protection and Management
- 3: Species Management
- 4: Education and Legislation
- 99: Other (elaborate in REMARKS field)

NOTE: This descriptor is new and did not occur in the EURISCO *ex situ* format yet.

23. Biological status of accession **(SAMPSTAT)**

The coding scheme proposed can be used at two different levels of detail: either by using the general codes (in boldface) such as 100, 200, or by using the more specific codes such as 110, 120, etc.

- 100: Wild**
 - 110: Natural
 - 120: Semi-natural/wild
 - 130: Semi-natural/sown
- 200: Weedy**
- 999: Other** (Elaborate in REMARKS field)

NOTE: The description of this descriptor has changed (less allowed values).

24. Other identifiers associated with the accession	(OTHERNUMB)
<p>The identifier(s) of any sample of this population in an <i>ex situ</i> collection. Use the following format: INSTCODE:ACCENUMB;INSTCODE:identifier;...</p> <p>INSTCODE and identifier are separated by a colon without space. Pairs of INSTCODE and identifier are separated by a semicolon without space. When the institute is not known, the identifier should be preceded by a colon.</p>	
25. Type of germplasm storage	(STORAGE)
<p>For <i>in situ</i> CWR populations, this descriptor should always have the value 60.</p> <p>60: <i>in situ</i> wild population</p> <p>NOTE: Status 60 is a new status! The description of this descriptor has been changed to apply to <i>in situ</i> CWR.</p>	
26. MLS status of the accession	(MLSSTAT)
<p>The status of the <i>in situ</i> accession of the CWR population with regards to the Multilateral System of Access and Benefit-Sharing (MLS) of the International Treaty, if available.</p> <p>0: Not available under the MLS</p> <p>1: Available under the MLS</p> <p>NOTE: The definition of this descriptor in Alercia et al. (2021)¹ refers to the <i>ex situ</i> accession, but in the CWR-NI and in EURISCO is applied to the <i>in situ</i> accession.</p>	
27. Remarks	(REMARKS)
<p>The remarks field is used to add notes or to elaborate on descriptors with value 99 or 999 (= Other). Prefix remarks with the field name they refer to and a colon (:) without space (e.g. COLLSRC:riverside). Distinct remarks referring to different fields are separated by semicolons without space.</p>	
28. Accession URL	(ACCEURL)
<p>URL linking to additional data about the population.</p> <p>Example: http://gbis.ipk-gatersleben.de/gbis_i/detail.jsf?akzessionId=31805</p> <p>NOTE: This description deviates from the EURISCO <i>ex situ</i> upload format.</p>	

¹ Alercia A, López F, Marsella M, Cerutti AL (2021) Descriptors for Crop Wild Relatives conserved *in situ* (CWRI v.1). Rome, FAO on behalf of the International Treaty on Plant Genetic Resources for Food and Agriculture. <https://doi.org/10.4060/cb3256en>

4 List of changes

In the following, the major changes compared with the 2022 version of the EURISCO *in situ* CWR data standard are listed.

4.1 MODIFIED DESCRIPTORS

- **SITEPROT:** multiple values allowed
- **CONSACTION:** multiple values allowed