

# MULTI-CROP PASSPORT DESCRIPTORS (in GRIN-Global)



## Revision Date

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*(draft)*

The FAO/BIOVERSITY Multi-Crop Passport Descriptors (MCPD V.2) is the result of a thorough revision of the original publication released by FAO/IPGRI in 2001. This document describes how GRIN-Global handles these descriptors. The FAO document can be found at:

<http://www.bioversityinternational.org/e-library/publications/detail/faobioversity-multi-crop-passport-descriptors-v2-mcpd-v2/>

## How are Passport Descriptors handled in the Curator Tool?

In general, passport data is stored in the Accession tables. "Tables" (plural) because there is the main Accession table and multiple children accession tables. There are also multiple accession\_inventory tables which are children to the main accession table. In the Curator Tool, the **Accession** and the **Accession\_Inv** dataviews are used to access this data.

For a specific accession, the simplest way to display or edit its passport data is to select the accession record in the data grid (the accession dataview is the displayed dataview) and then start the accession wizard. Using the wizard, you can easily review the related accession dataviews where much of the passport data is stored. (Germplasm data will be found in the Inventory dataviews.)

The screenshot shows the GRIN-Global v1.9.4.0 software interface. The main window displays a data grid with columns: Accession ID, Accession Prefix, Accession Number, Accession Suffix, Taxon, Name, and Origin. The grid contains several rows of accession data. A red circle '1' highlights the 'accessions' folder in the left-hand tree view. A red circle '2' highlights the 'Accessions' tab in the top navigation bar. A red circle '3' highlights the 'Accession Wizard' button in the top toolbar. A red circle '4' highlights the 'Accession Wizard v1.9.4.0' dialog box, which is open and shows fields for Accession Prefix (PI), Accession Number (650346), Accession Suffix, and Status ([Null]).

Accession ID	Accession Prefix	Accession Number	Accession Suffix	Taxon	Name	Origin
1016461	PI	650346		Helianthus annuus	Novi Sad 61	SCG
1016476	PI	650347		Helianthus annuus	Vniimk 8931	SCG
1021562	PI	597890		Helianthus annuus	ANN-1749	USA, So
1021563	PI	597891		Helianthus annuus	ANN-1750	USA, So

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The following table indicates where passport data is stored in GRIN-Global:

MCPD*	GRIN-Global
<p><b>1. Institute Code (INSTCODE)</b></p> <p>FAO WIEWS code of the institute where the accession is maintained. The codes consist of the 3-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 the FAO website (<a href="http://apps3.fao.org/wiews/wiews.jsp">http://apps3.fao.org/wiews/wiews.jsp</a>).</p>	<p><b>Site</b> dataview: <b>FAO Institute Number</b> field</p> <p>Use the <b>Site</b> dataview to add a record for the FAO institute code. Then use the <b>Cooperator</b> dataview to link the cooperators at those institutes by the <b>Site</b> column. (Site-ID Cooperators link to Sites.) For each accession, using the <b>Source</b> dataview, you indicate the cooperator(s) (individuals or organizations). The cooperators may be donors, collectors, or developers. (Recommendation: To add new cooperators, use the Cooperator wizard. Use the Accession Wizard to supply the accession source records and to associate the cooperators with the source record.)</p>
<p><b>2. Accession Number (ACCENUMB)</b></p> <p>This number serves as a unique identifier for accessions within a genebank, and is assigned when a sample is entered into the genebank collection (e.g. PI 113869)</p>	<p><b>Accession</b> dataview: <b>Accession -Prefix, -Number and -Suffix</b> fields</p> <p>Collectively, these three fields comprise the Accession’s identifier. Every accession must have a unique identifier; an organization can use up to three fields to create this identifier. Examples: PI 500001 or VIR 123456 2001. If the organization only uses accession_number_part1 for the identifier, then each one must be unique. If the organization uses either of the other two fields -- accession_number_part2 or _part3, then the two or three accession_number_parts, when combined, must be unique.</p>
<p><b>3. Collecting Number (COLLNUMB)</b></p> <p>Original identifier assigned by the collector(s) of the sample, normally composed of the name or initials of the collector(s) followed by a number (e.g. FM9909”). This identifier is essential for identifying duplicates held in different collections.</p>	<p><b>Accession_Inv_Name</b> dataview: <b>Name</b> field</p> <p>Input name fields in the <b>Accession_Inv_Name</b> dataview. Although an Accession can have multiple names (and therefore multiple name records), only one name can be listed in the Accession dataview. (Some refer to this name as the “top name.”) If an accession does not have any related records in the accession_inv_name table, the Name field is empty. When an accession has multiple related name records, the name displayed in the Accession dataview is the name with the lowest <b>Name Rank</b> value in the Accession_Inv_Name table. *</p>
<p><b>4. Collecting institute Code (COLLNUMB)</b></p> <p>FAO WIEWS code of the institute collecting the sample. If the holding institute has collected the material, the collecting institute code (COLLCODE) should be the same as the holding institute code (INSTCODE). Follows INSTCODE standard.</p>	<p>Refer to the GRIN-Global column for <b>Institute Code</b>.</p>
<p><b>4.1 Collecting Institute Name (COLLNAME)</b></p> <p>Name of the institute collecting the</p>	<p>The <b>Cooperator</b> table is used to store to cooperators (individuals or organizations). Add the Institute to the Cooperator table via the Cooperator dataview or the Cooperator wizard.</p>

<p>sample. This descriptor should be used only if COLLCODE cannot be filled because the FAO WIEWS code for this institute is not available.</p>	<p>For each accession, source cooperators are stored in the Accession Source record. The cooperators may be donors, collectors, or developers. (Recommendation: Use the Accession Wizard to supply the source records and cooperators.)</p>
<p><b>4.1.1 Collecting Institute Address (COLLINSTADDRESS)</b></p> <p>Address of the institute collecting the sample. This descriptor should be used only if COLLCODE cannot be filled because the FAO WIEWS code for this institute is not available.</p>	<p>The address of the institute is stored in the institute’s cooperator record in the <b>Cooperator</b> table.</p>
<p><b>4.2 Collecting Mission Identifier (COLLMISSID)</b></p> <p>Identifier of the collecting mission used by the Collecting Institute (e.g. CIATFOR-052, CN426)</p>	<p>(1) <b>Accession_inv_name</b> dataview, create an inventory <b>Name</b>; for <b>Category</b>, select <b>Exploration identifier</b></p> <p>(2) <b>Exploration</b> dataview: create an exploration record using the same identifier</p> <p>(3) <b>Exploration map</b> dataview: record the cooperators</p>
<p><b>5. Genus (GENUS)</b></p> <p>Genus name for taxon. Initial uppercase letter required.</p> <p><b>6. Species (SPECIES)</b></p> <p>Specific epithet portion of the scientific name in lowercase letters. Following abbreviation is allowed: ‘sp.’</p>	<p><b>Accession</b> dataview: <b>Taxon</b> field</p> <p>When GRIN-Global is installed, an organization has the option to load the taxonomy tables as used in the United States. However, an organization can omit these tables, it can edit them, and it can supplement the tables with the taxonomies preferred by the organization.</p>
<p><b>7. Species Authority (SPAUTHOR)</b></p> <p>Provide the authority for the species name.</p> <p><b>8. Subtaxa (SUBTAXA)</b></p> <p>Subtaxa can be used to store any additional taxonomic identifier. Following abbreviations are allowed: “subsp.” (for subspecies); “convar.” (for convariety); “var.” (for variety); “f.” (for form).</p> <p><b>9. Subtaxa Authority (SUBTAUTHOR)</b></p> <p>Provide the subtaxa authority at the most detailed taxonomic level.</p>	<p><b>Genus</b> and <b>Species</b> dataviews</p> <p>The <b>Genus</b> dataview has a <b>Genus Authority</b> field.</p> <p>The <b>Species</b> dataview contains the additional taxonomic identifiers and their respective authority fields: <b>Species</b>, <b>Subspecies</b>, <b>Variety</b>, <b>Subvarietal</b>, <b>Forma</b>, and <b>Taxon</b>.</p>
<p><b>10. Common Crop Name (CROPNAME)</b></p> <p>Name of the crop in colloquial language, preferably English (i.e. ‘malting barley’, ‘cauliflower’, or ‘white cabbage’)</p>	<p><b>Crop</b> dataview</p> <p>Use the <b>Crop</b> dataview to store crop names and descriptions.</p> <p>In GG, the Crop information is indirectly related to the Accession via the Observation records for the Accession. (Only if a n accession has observations will there be a relationship to the <b>Crop</b> table (and <b>Crop</b> field).</p>
<p><b>11. Accession Name (ACCENAME)</b></p> <p>Either a registered or other formal designation given to the accession. First letter uppercase. Multiple names separated with semicolon without space. For example: Rheinische</p>	<p>Refer to the description for <b>Collecting Number</b>.</p>

Vorgebirgstrauben;Emma;Avlon	
<p><b>12. Acquisition Date [YYYYMMDD] (ACQDATE)</b></p> <p>Date on which the accession entered the collection 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>Use the <b>Accession Source</b> dataview.</p> <p>For each accession, the acquisition dates are stored in the Accession Source record. (Recommendation: Use the Accession Wizard to supply the source records and cooperators.)</p>
<p><b>13. Country of Origin (ORIGCTY)</b></p> <p>3-letter ISO 3166-1 code of the country in which the sample was originally collected (e.g. landrace, crop wild relative, farmers' variety), bred or selected (breeding lines, GMOs, segregating populations, hybrids, modern cultivars, etc.).</p>	<p>Use the <b>Accession_Source</b> dataview. Select (Check) the <b>Is Origin?</b> field; select the source from the <b>Geography</b> field. (Recommendation: Use the Accession Wizard to supply the source records.)</p> <p>[??? the 3-letter ISO code – only in Site]</p>
<p><b>(Use 14-16 only if accession was collected)</b></p> <p><b>14. Location of Collecting Site (COLLSITE)</b></p> <p>Location information below the country level that describes where the accession was collected.</p>	<p>Use the <b>Accession_Source</b> dataview to store the collector <b>Formatted Locality</b> data.</p>
<p><b>15. Geographical Coordinates</b></p> <p>For latitude and longitude coordinates, two alternative formats are proposed, but the one reported by the collecting mission should be used</p>	<p>GG stores the decimal formats (15.1 and 15.3) only. If you need to store the degree formats, you could store these in the <b>Note</b> field.</p> <p>There are many converters online, such as one at <a href="http://andrew.hedges.name/experiments/convert_lat_long/">http://andrew.hedges.name/experiments/convert_lat_long/</a></p>
<p><b>15.1 Latitude of Collecting Site (Decimal degrees format) (DECLATITUDE)</b></p> <p>Latitude expressed in decimal degrees. Positive values are North of the Equator; Negative values are South of the Equator (e.g. -44.6975)</p> <p><b>15.2 Latitude of Collecting Site (LATITUDE)</b></p> <p>Degree (2 digits) minutes (2 digits), and seconds (2 digits) followed by N (North) or S (South) (e.g. 103020S). Every missing digit (minutes or seconds) should be indicated with a hyphen. Leading zeros are required (e.g. 10---S; 011530N; 4531--S).</p>	<p>For each accession, the DECLATITUDE is stored in the Accession Source record. (Recommendation: Use the Accession Wizard or <b>Accession_Source</b> dataview to supply the <b>Latitude</b> field. )</p>
<p><b>15.3 Longitude of Collecting Site (Decimal degrees format) (DECLONGITUDE)</b></p> <p>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)</p> <p><b>15.4 Longitude of collecting site</b></p>	<p>The two are mutually exclusive formats for Longitude. GRIN-Global expects latitude data in the Decimal Degrees format.</p> <p>For each accession, the DECLONGITUDE is stored in the Accession Source record. (Recommendation: Use the Accession Wizard or the <b>Accession_Source</b> dataview to supply the <b>Longitude</b> field. )</p>

<p><b>(LONGITUDE)</b></p> <p>Degree (3 digits), minutes (2 digits), and seconds (2 digits) followed by E (East) or W (West) (e.g. 0762510W). Every missing digit (minutes or seconds) should be indicated with a hyphen. Leading zeros are required (e.g. 076----W).</p>	
<p><b>15.5 Coordinate Uncertainty (COORDUNCERT)</b></p> <p>Uncertainty associated with the coordinates in meters. Leave the value empty if the uncertainty is unknown.</p>	<p><b>Coordinate Uncertainty</b> is stored in the Accession Source record. Use the Accession Wizard or the <b>Accession_Source</b> dataview to supply the <b>Uncertainty</b> field.</p>
<p><b>15.6 Coordinate Datum (COORDDATUM)</b></p> <p>The geodetic datum or spatial reference system upon which the decimal latitude and longitude coordinates are based (WGS84, ETRS89, NAD83). The GPS uses the WGS84 datum.</p>	<p><b>Georeference Datum</b> is stored in the Accession Source record. Use the Accession Wizard or the <b>Accession_Source</b> dataview to supply the <b>Georeference Datum</b> field.</p>
<p><b>15.7 Georeferencing Method (GEOREFMETH)</b></p> <p>The Georeferencing Method used (GPS, determined from map, gazetteer, or estimated using software. Leave the value empty if the Georeferencing Method is unknown.</p>	<p><b>Georeference Protocol</b> is stored in the Accession Source record. Use the Accession Wizard or the <b>Accession_Source</b> dataview to supply the <b>Georeference Protocol</b> field.</p>
<p><b>16. Elevation of Collecting Site (ELEVATION)</b></p> <p>Elevation of collecting site expressed in metres above sea level. Negative values are allowed.</p>	<p><b>Elevation Protocol</b> is stored in the Accession Source record. Use the Accession Wizard or the <b>Accession_Source</b> dataview to supply the <b>Elevation</b> field.</p>
<p><b>17. Collecting Date of Sample [YYYYMMDD] (COLLDATE)</b></p> <p>Collecting date of the sample, 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><b>Source Date</b> is stored in the Accession Source table. Use the Accession Wizard or the <b>Accession_Source</b> dataview to supply the <b>Source Date</b> field.</p>
<p><b>18. Breeding Institute Code (BREDCODE)</b></p> <p>FAO WIEWS code of the institute breeding the sample. If the holding institute has collected the material, the breeding institute code (BREDCODE) should be the same as the holding institute code (INSTCODE). Follows INSTCODE standard.</p>	<p>Refer to the GRIN-Global column for <b>Institute Code</b>.</p>
<p><b>18.1. Breeding Institute Name (BREDNAME)</b></p> <p>Name of the institute or person who</p>	<p>The <b>Cooperator</b> table is used to store to cooperators (individuals or organizations). Add the Institute to the Cooperator table via the <b>Cooperator</b> dataview or the <b>Cooperator</b> wizard.</p>

<p>bred the material. This descriptor should be used only if BREDCODE cannot be filled because the FAO WIEWS code for this institute is not available.</p>	<p>For each accession, cooperators are stored in the Accession Source record. The cooperators may be donors, collectors, or developers. (Recommendation: Use the Accession Wizard to supply the source records and cooperators.)</p>
<p><b>19. Biological Status of Accession (SAMPSTAT)</b></p>	<p>Coding scheme...wild, weedy, traditional ...</p> <p>??? add these to the IMPROVEMENT_LEVEL ? (add these values to the coding group?)</p> <p><b>Accession</b> dataview; <b>Level of Improvement</b></p>
<p><b>20. Ancestral Data (ANCEST)</b></p> <p>Information about pedigree or other description of ancestral information (e.g. parent variety in case of mutant or selection).</p>	<p>Use the <b>Accession Pedigree</b> dataview.</p>
<p><b>21. Collecting / Acquisition Source (COLLSRC)</b></p> <p>The Coding scheme ...</p>	<p>Specific and General Codes...</p> <p>??? add these values to the <b>ACCESSION_SOURCE_HABITAT_TYPE</b> Code Group</p> <p>get_accession_source DV;</p>
<p><b>22. Donor Institute Code (DONORCODE)</b></p> <p>FAP WIEWS code of the donor institute.</p>	<p>The <b>Cooperator</b> table is used to store to cooperators (individuals or organizations). Add the Institute to the Cooperator table via the <b>Cooperator</b> dataview or the <b>Cooperator</b> wizard.</p> <p>For each accession, cooperators are stored in the Accession Source record. The cooperators may be donors, collectors, or developers. (Recommendation: Use the Accession Wizard to supply the source records and cooperators.)</p>
<p><b>22.1 Donor Institute Name (DONORNAME)</b></p>	<p><b>The Organization</b> data is stored in the <b>Cooperator</b> table – use the Cooperator Wizard or dataview to enter cooperator data.</p>
<p><b>23. Donor Institute Number (DONORNUMBER)</b></p>	<p><b>Accession_Inv_Name</b> dataview: <b>Name</b> field</p> <p>Input name fields in the <b>Accession_Inv_Name</b> dataview. Although an Accession can have multiple names (and therefore multiple name records), only one name can be listed in the Accession dataview. (Some refer to this name as the “top name.”) If an accession does not have any related records in the accession_inv_name table, the Name field is empty. When an accession has multiple related name records, the name displayed in the Accession dataview is the name with the lowest <b>Name Rank</b> value in the Accession_Inv_Name table. *</p>
<p><b>24. Other Identifiers Associated with the Accession (OTHERNUMB)</b></p>	<p>Refer to the GRIN-Global description for <b>Collecting Number</b>.</p>
<p><b>25. Location of Safety Duplicates (DUPLSITE)</b></p> <p>FAO WIEWS code of the institute(s) where a safety duplicate of the accession is maintained.</p>	<p><b>Accession</b> dataview; <b>Backup Location 1</b> and <b>Backup Location 1</b> fields. The FAO Institute Numbers are stored In the Site record for each site.</p>

<p><b>25.1 Institute Maintaining the Safety Duplicate (DUPLINSNAME)</b> Name of the institute(s) where a safety duplicate of the accession is maintained.</p>	<p>The <b>Backup Location 1</b> and <b>Backup Location 1</b> fields use the GG Site Codes. The Site long Name FAO Institute Numbers are stored In the Site record for each site.</p>
<p><b>26. Type of Germplasm Storage (STORAGE)</b></p>	<p>??? add their values to GERMPASM_FORM</p>
<p><b>27. MLS Status of the Accession (MLSSTAT)</b> The status of an accession with regards to the Multilateral System (MLS) of the International Treaty on Plant Genetic resources for Food an Agriculture. 0 – No (Not included) 1 – Yes (Included) 99 – Other (Elaborate in REMARKS) section. -</p>	<p>???</p>
<p><b>28. Remarks (REMARKS)</b> The Remarks field is used to add notes.</p>	<p>Both the <b>Accession</b> and the <b>Accession_Source</b> dataviews have <b>Note</b> fields.</p>

\* Most of the text in the MCPD column is taken directly from the FAO/BIOVERSITY Multi-Crop Passport Descriptors (MCPD V.2 ) publication.