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GRIN-Global Workshop 2021 for European Genebanks (GRIN-Global II) 18-21 October 2022, Prague, Czech Republic



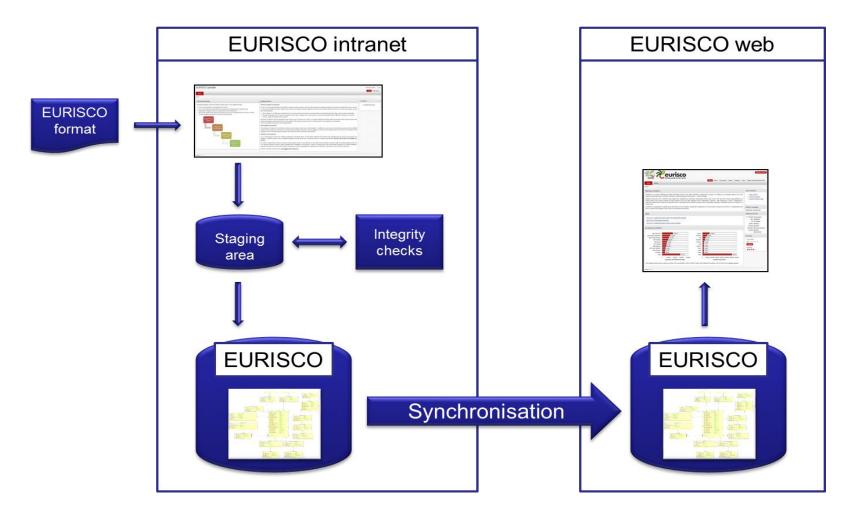
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General upload procedure of EURISCO



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Prerequisite

- Provision of passport data using the EURISCO-MCPD format as of November 2017
 - MCPD v2.1
 - Four additional descriptors
 - NICODE
 - ACCEURL
 - AEGISSTAT
 - HISTORIC



Descriptors for uploading passport data to EURISCO

2017-11-13

1 Introduction

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

The list is an extension of the FAO/Bioversity multi-crop passport descriptors (MCPD), version 2.1, which were published December 2015, developed jointly by Bioversity and FAO, with input from many documentation specialists worldwide, to provide international standards to facilitate germplasm passport information exchange. All MCPDs are included, without change and with the same formatting rules, in the current list.

Four additional descriptors (00, 29-31) were added for the specific purposes of EURISCO.

2 General formatting rules

The following formatting rules, as copied from the MCPD documentation, apply to all fields:

- 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 are 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. 1975-..., 1975cov), 1975c6-, 1975c600).
- 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: https://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/views).
 - 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/seed-pgr/gpa/nationalfocal-points/en/) or they can be requested from: WEWS@fao.org.
 - For institutes that no longer exist, or that were not assigned an FAO WIEWS institute code, please provide full details in descriptors 4.1, 4.1.1, 18.1, 22.1 and 25.1.

3 Descriptors

The descriptors are numbered according to the FAO/Bioversity multi-crop passport descriptors (MCPD), version 2.1. The first descriptor (numbered 00) and the last three (numbered 29-31) are additional, and specific to this EURISCO Descriptor List. Only the four fields identifying the accession are mandatory, all other fields are highly recommended. The mandatory fields are NICODE (00), INSTCODE (1), ACCENUMB (2) and GENUS (5). The combination of these fields has to be unique.

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Data exchange

- Data could be provided by reporting function in GG
- MS-Excel file
- Upload via the EURISCO intranet

| ECOPERITE Resources ECOPICIE | Findi | Urisco ng seeds for the future | | | |
|--|-------|--|----------------|-----------|----------|
| 合 Home | H | ome \ | | | |
| 🔍 Search | > | Welcome to EURISCO | | | |
| 止 Export data | > | About EURISCO | Featured crops | | |
| └─ [¬] Statistics & documents | > | The European Search Catalogue for Plant Genetic | Barley | Bean | Chickpea |
| O About | > | Resources (EURISCO) provides information about more than 2 million accessions of crop plants and their wild | ванеу | bean | Спіскреа |
| 💷 News | | relatives, preserved <i>ex situ</i> by about 400 institutes . It is based on a network of National Inventories of 43 | 1230 | | |
| 🖾 Newsletter subscription | | member countries and represents an important effort for the preservation of world's agrobiological diversity by providing information about the large genetic diversity | CH2 K | | |
| EURISCO intranet | | kept by the collaborating institutions. | | | |
| i Imprint | | Between 2003 and 2014, EURISCO was hosted and | Potato | Sunflower | Tomato |
| Data protection policy | | maintained by Bioversity International. Rome. Italy. Since 2014, EURISCO Is being maintained at the Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany. The central goal of EURISCO is to provide a one-stop-shop for information for the scientific community and for plant breeders. EURISCO contains both passport data and phenotypic data. | | | |

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Data exchange

| intranet | | | |
|-------------|---|---|---|
| | Home | | |
| import ~ | General proceeding | Update process | Templates |
| | <text><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></text> | Update mechanism URISECO supports both the complete replacement of data at the National Inventory (NI) level and the incremental update of selected records. The letter the more difficunt when only a small number of accessions when updating existing entities. The complete incremental update of the propose Unfortunation commended that a permanent unique descretarios. Determine a consistence of the incremental update of accessions when updating existing entities. The complete incremental update of the propose Unfortunation commended that a permanent unique descretarios. Determine a consistence of the incremental update of accessions when updating existing entities. The complete incremental update of accessions when updating existing entities. The complete incremental update of accessions when updating existing entities. The complete incremental update of accessions when updating existing entities. The complete incremental update of accessions when updating existing entities. The complete incremental update of accessions when updating existing entities. The complete incremental update of accessions when updating existing entities. The complete incremental update of accessions when update of accessions. The complete incremental up | Change Password Change Password More \ Upload File Integrity Checks Final Decision First Step 1: Upload File The first step of importing new or modified data into EURISCO is to upload a file containing National Inventory data to the EURISCO server. This file must be formatted in accordance with the MCPD EURISCO format Please select a file with extension .xlsx Fie \ test_for_workshop_mcpd2.xlsx Fie \ test_for_workshop_mcpd2.xlsx Validation Profile \ Descriptors with errors are skipped Valid |
| Notificatio | on 🕑 🕒 | | |
| | day. You will be informed by em. After finishing the import, differe | Integrity Checks Final Decision ataset has been created. The import itself as well as the integrity checks will be performed by a batch job, which runs on all as soon as the import is finished. ent reports showing errors that occurred during the import (if any) will be provided. Hease the new data to EURISCO or to withdraw it. | ns once a |

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GRIN Czech: new Data View: Passport Data EURISCO

| | Passport Data EU | RISCO | |
|---------------------|-----------------------------|--------------------------|---|
| Dataview | | | |
| Category: | Area: | | |
| Client | Accessi | ion | ~ |
| Dataview: | | | |
| Get Passport Data E | URISCO | | ~ |
| Viewer Stide | | | |
| Viewer Style | | | |
| Spreadsheet | Form | Both | |
| | | | |
| | | | |
| Form: | | | |

| ord | er_request Web (| order Request Attach | web_order_reques | t_item Web Coopera | ator Web User Cart | tem Web User Car | Passport Data EU | IRISCO Genetic An | notation Genetic M | arker Genetic Marke | er Citation Genetic (| Observation Geneti | c Observation Data | Method Citation Ac | ccession Inventory Gr | oup Map Accession | n Inventory Group 😕 | ¥ 💶 |
|-----|------------------|----------------------|------------------|--------------------|--------------------|------------------|------------------|-------------------|--------------------|---------------------|-----------------------|--------------------|----------------------|--------------------|-------------------------|-------------------|---------------------|---------|
| | Accession ID | nicode | puid | instcode | ACCENUMB | collnumb | collcode | collname | collinstaddress | collmissid | Genus | Species | Species Authority | Subspecies | Subspecies Authority | cropname | accename | acqdate |
| | 6459 | CZE | | CZE122 | 01C0106055 | 2/80901 | | | Turkey | TUR-89 | Triticum | monococcum | L. | aegilopoides | (Link) Thell. | winter wheat | T. boeoticum(Al | 1996 |
| | 7327 | CZE | | CZE122 | 01C0106924 | | | | | | Triticum | aestivum | L. | aestivum | | winter wheat | Bohemia | 2007 |
| 4 | 41851 | CZE | | CZE122 | 09H5700207 | | | | | | Lactuca | sativa | L. | | | head lettuce | Bohemia | 1964 |
| 1 | 50348 | CZE | | CZE031 | 10F0700159 | | | | | | Pyrus | communis | L. | | | pear | Bohemica | 1992 |

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00. NICODE (National Inventory Code) = constant, e.g. CZE

0. **PUID** (Persistent unique identifier) = accession.DOI

| Acces | sions | Accession Ac | tion | Accession | Sourc |
|-------|-------|--------------|------|------------------------|-------|
| | | | | | |
| | Acce | ession ID | | ital Object ntifier | |

1. **INSTCODE** (Institute code) = FAO WIEWS code of the institute where the accession is maintained; usually it is the institute of the owner of the accession

GRIN Czech: centralized storage of seeds, new column: accession.maintained_by → cooperator.acronym of relevant person (new column in cooperator)

| ucher Acc | Accessions Accession | Inventory Attach Inv | Accession Inventory A | ttach Inven | tory Inventory | Mainter | nance Policy Inve | entory Action | Cooperator Inventory Secure Slo |
|------------|----------------------|----------------------|-----------------------|-------------|----------------|---------|------------------------------|---------------|---------------------------------|
| | | | | | | | | | |
| d Date | Owned By | maintained_by | Last Name | Title | First Name | Job | Organization Abbreviation | acronym | Organization |
| 2015 15:26 | HERMUTH, Jiří, | PAPOUŠKOVÁ, | PAPOUŠKOVÁ | Engineer | Ludmila | | CSKRUZYNE | CZE122 | Crop Research Institute, Gene I |

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2. ACCENUMB (Accession number) = accession.number_part_2

GRIN Czech: accession.number_part_1

| Accessions Accession | | tion Accession Sou | rce Accession S | ource Cooperator | Accession Inventory Nam |
|----------------------|-----------|------------------------------|---------------------|---------------------|-------------------------|
| | | | | | |
| Acce | ession ID | Digital Object Identifier | Accession Prefix | Accession Number | Accession Suffix |
| 6015 | | | 01C0105610 | | |

3. **COLLNUMB** (Collecting number) = accession_inventory_name.plant_name for category= collector identifier

| Accessions | Accession Act | tion Accession Sou | Irce Accession So | ource Cooperator | Accession Inventory N | lame Accession IPF |
|------------|---------------------------|--------------------|-------------------|-------------------|-----------------------|--------------------|
| | | | | | | |
| Inve | ession intory ne ID | Accession | Inventory | Category | Name | Name Rank |
| 5891 | 72 | 01C0104086 | 01C0104086 ** | Collector identif | ier E392 | 10 |

4. **COLLCODE** (Collecting institute code) = FAO WIEWS code of the institute collecting the sample

GRIN Czech: cooperator.acronym

| Acces | sion Action Acces | sion Source Accession Source Cooperator | Accession Inventory Name Accession IPR | Accession Pedigree | Accession Inventory Voucher Acce | ntory Attach | Inv | entory Cooperator | Inventory Ma | aintenance Policy | Inventory Action | Inventory Secure |
|-------|-------------------------------|---|--|------------------------|----------------------------------|--------------|-----|------------------------------|--------------|-------------------|----------------------|------------------|
| | | | | | | | | | | | | |
| | Accession Source Map ID | Accession Source | Cooperator | | | st ime | Job | Organization Abbreviation | acronym | Organization | | |
| | 403906 | 01C0104086 COLLECTED 06/26/1988 | CZE122, , Crop Research Institute, Pragu | e, Gene Bank, Drnovska | á 507, Praha 6, , Czech Republic | | | CSKRUZYNE | CZE122 | Crop Research In | istitute, Prague, Ge | ene Bank |

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- 4.1. **COLLNAME** (Collecting institute name) = cooperator.organization
- 4.1.1. **COLLINSTADDRESS** (Collecting institute address) = cooperator.address_line1, line_2, line_3, city, geography

Both should be used only if COLLCODE cannot be filled because the FAO WIEWS code for this institute is not available

| ACCENUMB | collnumb | collcode | collname | collinstaddress |
|------------|----------|----------|----------|-----------------|
| 01C2100520 | E228 | CZE122 | | |

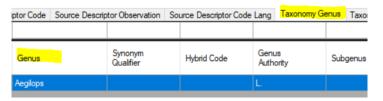
4. 2. **COLLMISSID** (Collecting mission identifier) = Source_descriptor_code_lang. title

| Web U | Jser Cart Item Site | Geography Cr | op Crop Trait (| Crop Trait Code Cro | p Trait Observation | Crop Trait Lang | Crop Trait Code Lang | Source Descriptor Code Lang | Crop Trait Observat |
|-------|--------------------------------------|--------------|-----------------|---------------------|---------------------|-----------------|------------------------|--------------------------------|---------------------|
| | | | | | | | | | |
| | Source Descriptor Code Lang ID | Descriptor | Code | Language | Title | | Description | | |
| | 1624 | EXPEDITION | SUNHOL-86 | English | SUNHOL-86 | | Collections in the Aze | erbaidžanu - 1986 - Holubec V. | |

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5. **GENUS** (Genus) = taxonomy_genus.genus_name



- 6. **SPECIES** (Species) = taxonomy_species.species_name
- 7. **SPAUTHOR** (Species authority) = taxonomy_species.species_authority
- 8. SUBTAXA (Subtaxon) = taxonomy_species.subspecies_name
- 9. **SUBTAUTHOR** (Subtaxon authority) = taxonomy_species.subspecies_authority

| ode Lang | Taxonomy Genus Taxonomy Species | | Taxonomy Family | Taxonon | ny Genus Citation | us Citation Taxonomy Common Name | | |
|----------|---------------------------------|------------|----------------------|---------|---------------------------|----------------------------------|-------------------------|--|
| | | | | | | | | |
| ienus | Accession Count | Species | Species Authority | | ls Subspecific Hybrid? | Subspecies | Subspecies Authority | |
| gilops | 34 | ventricosa | Tausch | | Ν | | | |

10. **CROPNAME**(Common crop name) = taxonomy_common _name.name for language_description=English

| xploration Map | Taxonomy Alternate Family Map | Taxo | nomy Common Name | Taxon | omy Crop Map | Taxo | nomy Family | Taxon |
|-----------------|-------------------------------|------|---------------------|-------|----------------|------|--------------------|-------|
| Taxon | | | Language Descriptio | n | Common Name | | Simplified Name | |
| Triticum aestiv | vum subsp. aestivum | | English | | bread wheat | | BREADWHE | AT |

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11. ACCENAME (Accession name) = accession_inventory_name.plant_name; rank = min

| ion Accession Inve | ntory Annotation Accession Inver | tory Attach Name Group Acce | ession Inventory Name | Accession IPR | Accession Pedigree | Accession Inventory | Voucher A | Accession |
|--------------------|----------------------------------|-----------------------------|-----------------------|--------------------|--------------------|---------------------|-----------|--------------------|
| Accession 🔺 | Inventory | Category | Name | | | | Name Ran | n <mark>k</mark> 🔺 |
| 01C0106924 | 01C0106924 ** | Cultivar name | Bohemia | | | | 1 | |
| 01C0106924 | 01C0106924 ** | National name | Bohemia | | | | 30 | |
| 01C0106924 | 01C0106924 ** | Other or unclassified name | SG-U 807 | 7 | | | 50 | |
| 01C0106924 | 01C0106924 ** | Full taxon | Triticum a | estivum var. lutes | cens | | 200 | |

12. ACQDATE (Acquisition date) = accession.initial_received_date

13. **ORIGCTY** (Country of origin) = accession_source.geography_id for source_type_code=origin

| Accessi | on Source Typ | Source Date Format | Source Date | Geography | Is |
|---------|---------------|-----------------------|----------------|------------|----|
| 01C2100 |)520 Origin | dd/mm/yyyy | | Azerbaijan | Y |

For collecting samples (14.-16.):

14. **COLLSITE** (Location of collecting site) = accession_source.collector_verbatim_locality

15.1. **DECLATITUDE** (Latitude of collecting site, decimal) = accession_source.lat_str (new column in GRIN Czech)

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- 15.2. **LATITUDE** (Latitude of collecting site) = accession_source.latitude
- 15.3. **DECLONGITUDE** (Longitude of collecting site, decimal) = accession_source.long_str (new column in GRIN Czech)
- 15.4. LONGITUDE (Longitude of collecting site) = accession_source.longitude
- 15.5. **COORDUNCERT** (Coordinate uncertainty) = no records in GRIN Czech
- 15.6. **COORDDATUM** (Coordinate datum) = no records in GRIN Czech
- 15.7. **GEOREFERMETH** (Georeferencing method) = no records in GRIN Czech
- 16. **ELEVATION** (Elevation) = accession_source.elevation_meters



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17. **COLLDATE** (Collecting date of sample) = accession_source.source_date (collected)

18. **BREDCODE** (Breeding institute code) = FAO WIEWS code of the institute breeding (developing) the sample

GRIN Czech: cooperator.acronym for breeder (developer) in accession_source

18.1. **BREDNAME** (Breeding institute name) = cooperator.organization for breeder in accession_source

19. **SAMPSTAT** (Biological status of accession) = accession.sampstat (new column in GRIN Czech, derived from Level of Improvement)

| Access | Accession Act | | on | on Accession Inventory Annotation | | | |
|--------|---------------|--|---------------------|-----------------------------------|----------|--|--|
| | Life Form | | | vel Of provement | sampstat | | |
| | Annual | | Wild | | 100 | | |
| | Annual | | Advanced/impro | | 500 | | |
| | Biennial | | Wild | | 100 | | |
| | Annual | | Traditional cultiva | | 300 | | |
| | Tree | | Adv | vanced/impro | 500 | | |

20. ANCEST (Ancestral data) = accession_pedigree.description (GRIN Czech)

| ion Accession Inver | ntory Annotation | Accession Inventory Attac | h Name Group | Accession Inventory | Name Accession IPR | Accession Pedigree | Accession Inventory Voucher | Accession Sour |
|---------------------|-------------------|---------------------------|---------------------|---------------------------------|--------------------|--------------------|-----------------------------|----------------|
| Accession 🔺 | Male Accession | | Female Accession | External Female Accession | Cross Method | P | edigree Description | |
| 10F0700159 | | | | | (4) crossing | Pa | rizanka/Chameuska | |

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21. **COLLSRC** (Collecting/acquisition source) = accession_source.acquisition_source_code

- 22. **DONORCODE** (Donor institute code) = FAO WIEWS code of the institute donating the sample GRIN Czech: cooperator.acronym *for donor in accession_source*
- 22.1. **DONORNAME** (Donor institute name) = cooperator.organization *for donor in accession_source*

23. **DONORNUMB** (Donor accession number) = accession_inventory_name.plant_name for category= donor

| ction Accession Inver | ntory Annotation Accession In | ventory Attach Name Group | Accession Inventory Name | Accession IPR | Accession Pedigree | Accession Inventory Vou | ucher Acces | sion |
|-----------------------|-------------------------------|---------------------------|--------------------------|---------------|--------------------|-------------------------|-------------|------|
| Accession 🔺 | Inventory | Category | Name | | | Na | ame Rank | |
| 01C0106055 | 01C0106055 ** | Donor identifier | IG 44886 | ; ; | | 40 | | |

24. **OTHERNUMB** (Other identifiers associated with the accession) = accession_inventory_name.plant_name for category= other

| ion Accession Inve | entory Annotation Accession | on Inventory Attach Name Group Acces | sion Inventory Name Accession IPR Accession F | Pedigree Accession Inventory Voucher Accession |
|--------------------|-----------------------------|--------------------------------------|---|--|
| Accession | Inventory | Category | Name | Name Rank 🔺 |
| 01C0106924 | 01C0106924 ** | Cultivar name | Bohemia | 1 |
| 01C0106924 | 01C0106924 ** | National name | Bohemia | 30 |
| 01C0106924 | 01C0106924 ** | Other or unclassified name | SG-U 8077 | 50 |
| 01C0106924 | 01C0106924 ** | Full taxon | Triticum aestivum var. lutescens | 200 |

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25. **DUPLSITE** (Location of safety duplicates) = accession.backup_location1_site_id; accession.backup_location2_site_id

25.1. **DUPLINSTNAME** (Institute maintaining safety duplicates) = code_value_lang.title for code geography_country_code for accession.backup_location1_site_id; accession.backup_location2_site_id

| n Source | Accessions | Accession Source Coo | perator | Inventory | Inventory Action | Inve |
|----------|------------------|----------------------|---------|----------------|------------------|------|
| | ls Backed Up? | Backup Location 1 | | kup ation 2 | Status | |
| | Y | SVK001 | NOF | R051 | Active | |
| | | | | | | |

- 26. **STORAGE** (Type of germplasm storage) = inventory.form_type_code
- 27. **MLSSTAT** (MLS status of the accession) = MLS=1 \rightarrow accession_ipr.type_code = MTA-MLS-Utility

| Acces | sions Accession Act | ion Accession Inver | ntory Annotation Ac | cession Inventory Att | ach Name Group Accessio | on Inventory | y Name Accessio | n IPR Act |
|-------|---------------------|---------------------|---------------------|-----------------------|-----------------------------|--------------|-----------------|------------------|
| | Accession IPR ID | Accession 🔺 | Taxon | Name | IPR Type | | IPR Number | IPR Crop Name |
| • | 770187 | 01C0106924 | Triticum aestivum | Bohemia | Czech registration | | | |
| | 59049 | 01C0106924 | Triticum aestivum | Bohemia | FAO Standard Material Trans | fer Agr | | |
| | 122754 | 01C0106924 | Triticum aestivum | Bohemia | MLS | | | |

28. **REMARKS** (Remarks) = accession.note

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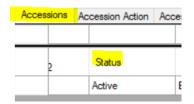


29. ACEURL (Accession URL) = accession URL in GRIN Czech/GeNBIS

30. **AEGISTAT** (AEGIS status) = AEGIS=1 \rightarrow accession_ipr.type_code = MTA-AEGIS-Utility (new code in GRIN Czech)

| on Accession | Inve | ntory Annotation A | ccession Inventory At | tach Name Group Accession Invento | ry Name Accession | IPR Ac |
|--------------|------|--------------------|-----------------------|------------------------------------|-------------------|-----------------|
| Accession | | Taxon | Name | IPR Type | IPR Number | IPR Cro Name |
| 01C0106924 | | Triticum aestivum | . Bohemia | Czech registration | | |
| 01C0106924 | | Triticum aestivum | . Bohemia | FAO Standard Material Transfer Agr | | |
| 01C0106924 | | Triticum aestivum | . Bohemia | MLS | | |
| 01C0106924 | | Triticum aestivum | . Bohemia | AEGIS collection | | |
| | | | | | | |

31. **HISTORIC** (Historic accession) = Historic = $0 \rightarrow \text{accession.status_code} = \text{active}$



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Reporting by NordGen



- Multigenebank data -> NordGen reports NordGen data and National genebanks report their data
- In GENBIS, MCPD data for all accessions is compiled from many tables.
- Since it is a heavy database operation, this is done every night
- GG WEB prepared Form Reports named 'MCPD' is used by NFPs to extract their accessions with simple form filter
- Oueried data is exported from GENBIS
- NFP reports to EURISCO.

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Passport report tool as used in GENBIS



| Choose Rep | ort: | Create Query URL Download Curator T |
|----------------|---|--|
| MCPD | ~ | |
| Report Desc | ription: | |
| Export Multi C | rop Password Data. Filter by Nicode, Instcode and | l or Accession number prefix. |
| Enter Param | eter Value(s): | |
| | | |
| Name | Value | |
| nicode | | |
| instcode | | |
| prefix | | |
| | | |
| Limit: 1000 | | |
| | | |
| Generate Rep | | |

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