

European Vitis Database passport data and descriptor recording rules

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ECPGR Secretariat

European Vitis Database Passport Data

Introduction

This descriptor list is used for uploading information to the European *Vitis* Database (EVDB) and thus purely a format of data exchange.

The list is an extension of the FAO/IPGRI *Multi-crop Passport Descriptors* (MCPDs) which were published December 2001, developed jointly by IPGRI¹ and FAO, with input from many documentation specialists worldwide, to provide international standards to facilitate germplasm passport information exchange.

All MCPDs (1-28) are included, without change and with the same format rules, in the current list.

Five additional descriptors (29-33) that were added for the specific purposes of EURISCO are also included.

Four additional descriptors were added for the specific purposes of the EVDB (A. Variety name; B. Berry colour; C. Country of origin of the variety; D. Year of crossing).

General format rules

Following format rules apply to all fields:

- If a field allows multiple values, these values should be separated by a semicolon (;) without space(s) (i.e. Accession name: "Rheinische Vorgebirgstrauben; Emma; Avlon")
- A field for which no value is available should be left empty (i.e. Elevation). If data are exchanged in ASCII format for a field with a missing numeric value, it 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 and/or day are missing this should be indicated with hyphens. Leading zeros are required (i.e. 197506--, or 1975----).
- Latitude and longitude are recorded in an alphanumeric format. If the minutes or seconds are missing, this should be indicated with hyphens. Leading zeros are required.
- Country names: 3-letter ISO 3166-1 codes are used (including the codes that are no longer in use in the ISO 3166-1, such as DDR).

The ISO 3166-1 Code List can be found at

http://unstats.un.org/unsd/methods/m49/m49alpha.htm

Country or area numerical codes added or changed since 1982 are available on-line at http://unstats.un.org/unsd/methods/m49/m49chang.htm

• Institutes: the FAO Institute Codes should be used as maintained by the FAO. The codes consist of the 3-letter ISO 3166 country code of the country where the institute is located plus a 3-digit number.

The current set of Institute Codes is available from the FAO Web site http://apps3.fao.org/wiews/institute query.htm?i l=EN

If new Institute Codes are required, they can be generated on-line at http://apps3.fao.org/wiews/wiewspage.jsp?show=newuserdialog.jsp

• The preferred language for free text fields is English (i.e. Location of collecting site and Remarks).

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¹ Now Bioversity International

MULTI-CROP PASSPORT DESCRIPTORS

1. Institute code (INSTCODE)

FAO Institute Code of the institute where the accession is maintained.

Example: NLD037

2. Accession number (ACCENUMB)

This number serves as a unique identifier for accessions within a genebank collection, and is assigned when a sample is entered into the genebank collection.

Example: CGN00254

3. Collecting number

(COLLNUMB)

Original number assigned by the collector(s) of the sample, normally composed of the name or initials of the collector(s) followed by a number. This number is essential for identifying duplicates held in different collections.

Example: FA90-110

4. Collecting institute code

(COLLCODE)

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).

Example: NLD037

5. Genus (GENUS)

Genus name for taxon, in Latin. Initial uppercase letter required.

Example: Allium

6. Species (SPECIES)

Specific epithet portion of the scientific name, in Latin, in lowercase letters. Following abbreviation is allowed: 'sp.'

Example: paniculatum

7. Species authority

(SPAUTHOR)

The authority for the species name.

Example: L.

8. Subtaxa (SUBTAXA)

Subtaxa can be used to store any additional taxonomic identifier, in Latin. Following abbreviations are allowed: 'subsp.' (for subspecies); 'convar.' (for convariety); 'var.' (for variety); 'f.' (for form).

Example: subsp. fuscum

9. Subtaxa authority

(SUBTAUTHOR)

The subtaxa authority at the most detailed taxonomic level.

Example: (Waldst. et Kit.) Arc.

10. Common crop name

(CROPNAME)

Name of the crop in colloquial language, preferably English.

Example: malting barley Example: cauliflower

11. Accession name (ACCENAME)

Either a registered or other formal designation given to the accession. First letter uppercase. Multiple names separated with semicolon without space.

Example: Rheinische Vorgebirgstrauben; Emma; Avlon

12. Acquisition date

(ACQDATE)

Date on which the accession entered the collection as YYYYMMDD. Missing data (MM or DD) should be indicated with hyphens. Leading zeros are required.

Example: 1968----Example: 20020620

13. Country of origin

(ORIGCTY)

Code of the country in which the sample was originally collected.

Example: NLD

14. Location of collecting site

(COLLSITE)

Location information below the country level that describes where the accession was collected. This might include the distance in kilometres and direction from the nearest town, village or map grid reference point.

Example: 7 km south of Curitiba in the state of Parana

15. Latitude of collecting site

(LATITUDE)

Degree (2 digits) minutes (2 digits), and seconds (2 digits) followed by N (North) or S (South). Every missing digit (minutes or seconds) should be indicated with a hyphen. Leading zeros are required.

Example: 10----S Example: 011530N Example: 4531--

16. Longitude of collecting site

(LONGITUDE)

Degree (3 digits), minutes (2 digits), and seconds (2 digits) followed by E (East) or W (West). Every missing digit (minutes or seconds) should be indicated with a hyphen. Leading zeros are required.

Example: 0762510W Example: 076----W

17. Elevation of collecting site

(ELEVATION)

Elevation of collecting site expressed in meters above sea level. Negative values are allowed.

Example: 763

18. Collecting date of sample

(COLLDATE)

Collecting date of the sample as YYYYMMDD. Missing data (MM or DD) should be indicated with hyphens. Leading zeros are required.

Example: 1968----Example: 20020620

19. Breeding institute code

(BREDCODE)

FAO Institute Code of the institute that has bred the material.

20. Biological status of accession

(SAMPSTAT)

The coding scheme proposed can be used at 3 different levels of detail: either by using the general codes (in boldface) such as 100, 200, 300, 400 or by using the more specific codes such as 110, 120 etc.

100) Wild

110) Natural

120) Semi-natural/wild

200) Weedy

300) Traditional cultivar/landrace

400) Breeding/research material

410) Breeder's line

411) Synthetic population

412) Hybrid

413) Founder stock/base population

414) Inbred line (parent of hybrid cultivar)

415) Segregating population

420) Mutant/genetic stock

500) Advanced/improved cultivar

999) Other (elaborate in REMARKS field)

21. Ancestral data (ANCEST)

Information about either pedigree or other description of ancestral information (i.e. parent variety in case of mutant or selection).

Example: Hanna/7*Atlas//Turk/8*Atlas Example: mutation found in Hanna Example: selection from Irene

Example: cross involving amongst others Hanna and Irene

22. Collecting/acquisition source

(COLLSRC)

The coding scheme proposed can be used at 2 different levels of detail: either by using the general codes (in boldface) such as 10, 20, 30, 40 or by using the more specific codes such as 11, 12 etc.

- 10) Wild habitat
 - 11) Forest/woodland
 - 12) Shrubland
 - 13) Grassland
 - 14) Desert/tundra
 - 15) Aquatic habitat
- 20) Farm or cultivated habitat
 - 21) Field
 - 22) Orchard
 - 23) Backyard, kitchen or home garden (urban, peri-urban or rural)
 - 24) Fallow land
 - 25) Pasture
 - 26) Farm store
 - 27) Threshing floor
 - 28) Park
- 30) Market or shop
- 40) Institute, Experimental station, Research organization, Genebank
- 50) Seed company
- 60) Weedy, disturbed or ruderal habitat
 - 61) Roadside
 - 62) Field margin
- 99) Other (Elaborate in REMARKS field)

23. Donor institute code

(DONORCODE)

FAO Institute Code for the donor institute.

24. Donor accession number

(DONORNUMB)

Number assigned to an accession by the donor.

Example: NGB1912

25. Other identification (numbers) associated with the accession

(OTHERNUMB)

Any other identification (numbers) known to exist in other collections for this accession. Use the following system: INSTCODE:ACCENUMB;INSTCODE:ACCENUMB;... INSTCODE and ACCENUMB follow the standard described above and are separated by a colon. Pairs of INSTCODE and ACCENUMB are separated by a semicolon without space. When the institute is not known, the number should be preceded by a colon. Example: NLD037:CGN00254

26. Location of safety duplicates

(DUPLSITE)

FAO Institute Code of the institute where a safety duplicate of 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.

27. Type of germplasm storage

(STORAGE)

If germplasm is maintained under different types of storage, multiple choices are allowed (separated by a semicolon). (Refer to FAO/IPGRI Genebank Standards 1994 for details on storage type.)

- 10) Seed collection
 - 11) Short-term
 - 12) Medium-term
 - 13) Long-term
- 20) Field collection
- 30) In vitro collection (Slow growth)
- 40) Cryopreserved collection
- 99) Other (elaborate in REMARKS field)

28. Remarks (REMARKS)

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. Separate remarks referring to different fields are separated by semicolons without space.

Example: COLLSRC:roadside

EURISCO DESCRIPTORS

29. Decoded collecting institute

(COLLDESCR)

Brief name and location of the collecting institute. Only to be used if COLLCODE can not be used since the FAO Institution Code for this institute is not (yet) available.

Example: Tuinartikelen Jan van Zomeren, Arnhem, The Netherlands

30. Decoded breeding institute

(BREDDESCR)

Brief name and location of the breeding institute. Only to be used if BREDCODE can not be used since the FAO Institution Code for this institute is not (yet) available.

Example: CFFR from Chile

31. Decoded donor institute

(DONORDESCR)

Brief name and location of the donor institute. Only to be used if DONORCODE can not be used since the FAO Institution Code for this institute is not (yet) available.

Example: Nelly Goudwaard, Groningen, The Netherlands

32. Decoded safety-duplication location

(DUPLDESCR)

Brief name and location of the institute maintaining the safety duplicate. Only to be used if DUPLSITE can not be used since the FAO Institution Code for this institute is not (vet) available.

Example: Pakhoed Freezers inc., Paramaribo, Surinam

33. Accession URL (ACCEURL)

URL linking to additional data about the accession either in the holding genebank or from another source.

Example: www.cgn.wageningen-ur.nl/pgr/collections/passdeta.asp?accenumb=CGN04848

EUROPEAN VITIS DATABASE – ADDITIONAL PASSPORT DESCRIPTORS

A. Variety name

Name of the variety, after it has been identified with certainty.

Example: Prokupaz

B. Berry colour

Colour of the berry skin: B (white), N (black), Rs (rose), G (grey) and Rg (red)

Example: Rs

C. Country of origin of the variety

Code of the country in which the variety originated.

Example: ARM

D. Year of crossing

(BREDYEAR)

Year in which the variety was created (YYYY).

Example: 1926

Passport data and descriptor recording rules for the compilation of the European *Vitis* Database

<u>General remark</u>: any field without information should be left blank. The provided format file should be strictly adhered to.

1. Passport data

- a. The adopted model is the complete list of the FAO/IPGRI *Multi-crop Passport Descriptors*, extended with the EURISCO descriptors (see Appendix II), consisting of 33 descriptors.
- b. Within those 33 descriptors, the following should be given priority: Species, Accession number, Accession name, Institute code, Donor institute code, Common crop name (i.e. Table grape, Wine grape, Raisin grape, etc.), Ancestral data and Acquisition date.
- c. Four additional passport descriptors for *Vitis* are: A. Variety name, after identification; B. Berry colour with the recommended notations: B (white), N (black), Rs (rose), G (grey) and Rg (red); C. Country of origin of the variety: code of the country in which the variety originated; and D. Year of crossing: year in which the variety was created.

2. Primary descriptors (ampelographic)

- a. Notations consist of numbers from 1 to 9
- b. More than one notation can be adopted for one single descriptor if:
 - i. Two or more expression levels occur during the observation (phenotype variability)
 - ii. The appropriate notation is between the two closest expressions levels. In such cases, use the two or more notations separated by "|" without spaces (examples: 5|7 or 3|7|9)
- c. For qualitative descriptors the expression levels can occasionally be discontinuous (examples: $1\,|\,5\,|\,7$ or $1\,|\,2\,|\,4$)
- 3. Primary descriptors (ampelometric): do not use expression levels (1, 3, 5, 7, 9) but measured parameters
 - a. One single notation is recommended (average)
 - b. Values in mm for lengths and in degrees for angles (no decimals)

4. Secondary descriptors

a. Give proper attention to measurement units and decimals indicated in descriptor definitions

5. Molecular markers

- a. Data must be coded following the rules specified in the descriptor definitions (example: CF1, MU2, 99R2+2)
- b. The first data recorded has to be the smaller allele. In case of homozygosis, use the same value for the second recorded data. In case a third allele occurs, record a third data.
- c. Rough data (non codified) can be given referring to the 2 or 3 alleles.
- d. Publication references can be provided.