Creating synergy between EURISCO and GeneSys

Theo van Hintum

Centre for Genetic Resources, the Netherlands

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For quality of life

Synergy EURISCO and GeneSys

- EURISCO: currently passport data, upload mechanism and network of data suppliers
  - passport data already included in GeneSys

- EURISCO and Genesys
  - both want to handle C&E data
  - how does it fit – how to benefit from each other
    - in any case: avoid double work !

Synergy EURISCO and GeneSys

- EURISCO proposals need to be implemented by Bioversity
  - Bioversity also responsible for Giga and thus GeneSys
    - will not invest in two competing proposals
  - initiative to inform each other about the plans and products
    - Michael created a possibility for Fawzy to visit Theo
    - Frank, Siegfried and CGN staff joined

Synergy EURISCO and GeneSys

- result: “Note on creating synergy between GeneSys and EURISCO”
  - authors: Theo (EURISCO) and Fawzy (GeneSys)
  - objective: to analyze both approaches and find overlap and possibilities for synergism
    - inventory of required adaptations to become compatible

Synergy EURISCO and GeneSys

- observations
  - GeneSys is database with interface based on Grin & ICARDA data sets
    - technical solutions for practical problems (such as one table per crop/trait/method combination)
    - crop based
    - pragmatic solutions (such as the trait categories)
  - EURISCO is a proposal for a repository
    - community support
    - aimed at easiest possible upload
    - EURISCO based (thus no crop-concept)

Synergy EURISCO and GeneSys

- observations
  - GeneSys is poorly defined; there is no documentation with schema and data dictionary (with format rules, etc.)
  - structural differences are non-significant
    - only the crop basis of GeneSys might cause problems
    - the format differences could not be inventoried

Synergy EURISCO and GeneSys

- steps forward
  - EURISCO and GeneSys have to make sure that they stay informed about each other - representation in each others planning meetings should be arranged
  - GeneSys should develop its documentation to inform EURISCO and others about its structures, format rules, etc - once this is available, a detailed comparison of the two formats should be made and in case of non-compatibility solutions should be discussed and implemented

Synergy EURISCO and GeneSys

- steps forward
  - GeneSys and EURISCO should select/compile and agree on a list of crops and their names to be used by both
    - should cover (close to) all species occurring in both systems
  - GeneSys and EURISCO should jointly develop a system of standardized trait names
    - compatible with the trait categories in GeneSys
    - on existing ontologies (such as those of the Generation Challenge Programme, the Trait Ontology Consortium, etc.).

Synergy EURISCO and GeneSys

- steps forward
  - EURISCO should incorporate the crop concept into the taxonomy system it will develop
    - no part of the uploading format
  - EURISCO should expand its upload format with a few optional fields that are essential for the proper use of GeneSys
    - add Methods.Unit & Methods.Options that allow automatic de- and recoding of scores
    - information is already contained in the current element TRAIT.TRAIT_METHOD
    - loading them in proposed fields avoids ‘manual’ atomization

Synergy EURISCO and GeneSys

- steps forward
  - GeneSys and EURISCO should both consider adding additional optional fields
    - GeneSys: DATASET.UPLOADERCODE and TRAIT.TRAIT_REMARKS
    - EURISCO: Metadata.Institute, Metadata.E_Date, Metadata.Location, Metadata.Alt, Methods.Range

Synergy EURISCO and GeneSys

- conclusions
  - given the obvious complementarity and relatively small differences between GeneSys and the EURISCO initiative it is advisable to let the two approaches converge
  - it is hoped that the functionality of GeneSys, using the elements developed by EURISCO, will make the EURISCO activities in this field redundant
    - for the time being the systems are too different in scope and objectives to eliminate one of them