The role of EURISCO in a European Evaluation Network

PPP Workshop, 27-28 March 2018, Rome







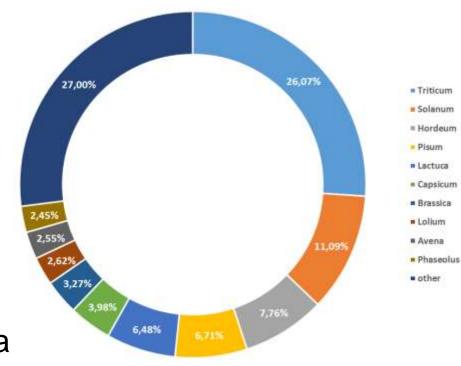
STATUS QUO OF C&E DATA IN EURISCO





C&E data in EURISCO

- Extension available since summer 2016
- Currently, 1,652,895 records of data from seven countries
 - Czech Republic
 - Germany
 - Latvia
 - The Netherlands
 - Poland
 - Romania
 - United Kingdom
- 68,821 accs. with C&E data





As of 2018-03-19



Well known challenges

- Difficult to handle due to lots of "standards":
 - Different descriptor names/synonyms
 - Different rating scales
 - Nominal, ordinal, metric scale
 - Different amounts of meta information
 - When, where, how, by whom?
 - Experiment set-up, treatment etc.





Current EURISCO Approach

- Result of discussions of previous years
- Suitable proposal compiled within the ECPGR Doc&Info working group
- Pragmatic approach: Import of existing data as-is to reach critical mass
 - No standardisation of trait, scale or experimental design
 - Only standardisation of exchange format
 - As simple as possible
 - As few fields as possible
 - → "minimum consensus"





Data model for C&E data

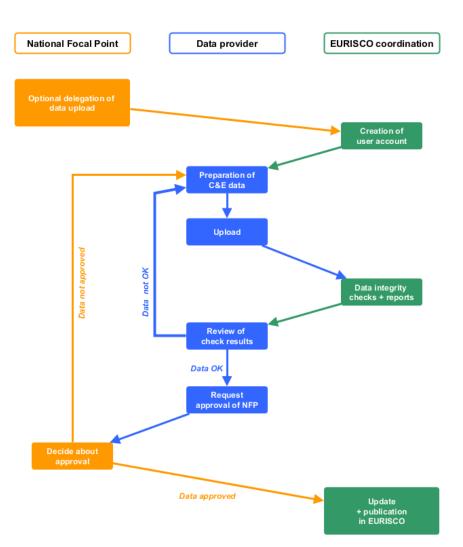
GENOTYPE Identified by EURISCO descriptors **DATASET** May comprise different experiments **EXPERIMENT** • Multiple genotypes are scored for different traits TRAIT Characteristic feature to be scored **S**CORES Value of a trait for a genotype





Proceeding for data upload

- Prerequisite:
 - Only non-confidential C&E data
 - Only data of accessions listed in EURISCO
- Impact
 - NFPs responsible for data upload (Data Sharing Agreements)
 - → May nominate users for (sub) accounts for data uploads
 - → NFPs must approve data before publication
- Data formatting
 - According to exchange format in MS Excel (.xlsx) files
- Upload via EURISCO intranet







Data upload in three steps

File parsing and upload via Java tool

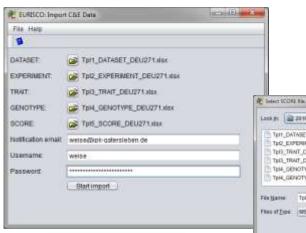
data owner

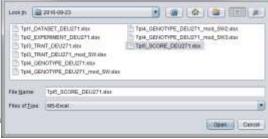
Data integrity checks

EURISCO management

Approval / withdrawal of data for publishing on the EURISCO website

data owner/NFP







ROLE OF EURISCO





Support data harmonisation

- Harmonisation of experiment set-up, treatment etc.
 - Minimum approach: better description, e.g. MIAPPE
 - Desirable: harmonised protocols
- Structuring of traits/methods/scales aiming at standardisation
 - Should be discussed by crop experts (ECPGR crop working groups) → focus on most active groups at the beginning
 - Mapping onto ontology terms, e.g. Crop Ontology
- Input of EURISCO coordination
 - Provision of experiences from pre-breeding projects
 - Support for mapping of traits, e.g. tools





Support data management

- Provide an intranet platform for project partners
 - Use existing infrastructure for C&E data (in a separate intranet)
 - Exchange format
 - Upload and check tools
 - Extension for privileged access (data embargo period)
 - Data could be published automatically after expiration
 - In principle, also non-EURISCO material could be managed
 - How to handle this data after embargo period?
 - Funding?
 - Development of extensions by means of a third-party project
 - Development in the frame of the regular EURISCO funding





General support

- Provide a supporting documentation unit
 - Templates
 - Standards
 - **—** ...

Training + helpdesk







THANK YOU FOR YOUR ATTENTION



