How to use data from phytocoenological databases from SE Europe for broad scale analysis of riparian vegetation?

Kiril Vassilev, Krakow, 15.05.2018

cost
EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY

Funded by the Horizon 2020 Framework Programme
of the European Union

Why phytocoenological databases are so important nowadays?

- TURBOVEG is the widest used phytocoenological database
- Friendly useful for storage of plots (relevés)
- Different kind of exports
- Easy ways for import of data from different format
- Selection procedures
- Local vs. regional classification

European Vegetation Archive (EVA)

- Data may be used for analysis of flora, ecosystem services, mapping of habitats, etc.
- 74 databases (1 496 368 vegetation plots – 2018) – 65 % semi-restricted regime, 23% restricted regime & 15% free regime;
- Data have been used for 64 projects, 18 started in 2018;
- Up to now data have contributed for 11 journal papers, 1 book, 9 technical reports, 1 bachelor thesis & 43 presentations at conferences & workshops

Potential databases

- Balkan Vegetation Database (EU-00-019, 12 415 reléves)
- SE Europe Forest Database (EU-00-021, 3 675 reléves)
- Vegetation Database of Albania (EU-AL-001, 540 reléves)
- Austrian Vegetation Database (EU-AT-001, 53 406 reléves)
- Czech National Phytosociological Database (EU-CZ-001, 113 009 reléves)
- Hellenic Woodland Database & EU-GR-007 Hellenic Beech Forests Database (EU-GR-006, 3199 reléves)
- Croatian Vegetation Database (EU-HR-002, 8735 reléves)
- Vegetation Database of the Republic of Macedonia (EU-MK-001, 1417 reléves)
- Romanian Forest Database (EU-RO-007, 9640 reléves)
- Database of Forest Vegetation in Republic of Serbia & EU-RS-004 Vegetation Database of Northern Part of Serbia (AP Vojvodina) (EU-RS-003, 4953 reléves)
- Vegetation Database of Slovenia (EU-SI-001, 10 986 reléves)
- Slovak Vegetation Database (EU-SK-001, 36 411 reléves)

Potential steps for broad-scale analysis

- Data request from EVA – following rules for potential co-authorship
- Data selection – region, plot size, vegetation types (syntaxa codes & Expert systems), year of publication
- Checking of data structure – to exclude transitional reléves
- Species nomenclature standardization - Euro+Med PlantDatabase

Analysis

- Core team of scientists
- Choosing or/testing different numerical methods – Modified TWINSPAN, PC-ORD ….
- One or combination between several methods
- Producing synoptic tables, maps, diagrams
- Information about management types, woodland structure, invasion of alien species


Thank you for your attention!