Geophysical Research Abstracts
Vol. 14, EGU2012-1125-3, 2012
EGU General Assembly 2012

A European Humus Forms Reference Base

A. Zanella (1), M. Englisch (2), J.-F. Ponge (3), B. Jabiol (4), G. Sartori (5), and C. Gardi (6)

(1) University of Padua, Department TeSAF, Legnaro, Italy (augusto.zanella@unipd.it, 00390498272686), (2) Bundesamt für Wald, Department of Forest Ecology and Soil, Vienna, Auistria (michael.englisch@bfw.gv.at), (3) Museum National Histoire Naturelle, CNRS UMR 7179, Brunoy, France (ponge@mnhn.fr), (4) AgroParisTech, ENGREF-LERFOB, Nancy, France (bernard.jabiol@agroparistech.fr), (5) Museo Tridentino di Scienze Naturali, Trento, Italy (giacomo.sartori@ing.unitn.it), (6) European Commission, Institute for Environment & Sustainability - DG JRC, Ispra, Italy (ciro.gardi@jrc.ec.europa.eu)

From 2003 on, a panel of experts in humus and humus dynamics (Humus group) has been working about a standardisation and improvement of existing national humus classifications. Some important goals have been reached, in order to share data and experiences:
a) definition of specific terms; b) description of 15 types of diagnostic horizons; c) of 10 basic humus forms references; d) subdivision of each main reference in 2-4 sub-unities; e) elaboration of a general European Humus Form Reference Base (http://hal-agroparistech.archives-ouvertes.fr/docs/00/56/17/95/PDF/Humus_Forms_ERB_31_01_2011.pdf); f) publication of the scientific significance of this base of classification as an article [A European morpho-functional classification of humus forms. Geoderma, 164 (3-4), 138-145].
The classification will be updated every 2 years and presently the Humus group is assessing biological (general: soil, vegetation, biome; specific: fungi, bacteria, pedofauna), physical (air temperature, rainfall) and chemical (pH, mineral elements, organic matter, quality and quantity of humic components...) factors which characterize basic humus forms and their varieties. The content of the new version of the classification is planned to be more "practical", like an ecological manual which lists associated humus forms and environmental data in the aim to contribute to a more precise environmental diagnosis of every analysed terrestrial and semiterrestrial European ecosystem.
The Humus group is also involved in an endeavour to include humus forms in the World Reference Base for Soils (WRB-FAO) according to nomenclatural principles erected for soil profiles. Thirty basic references have been defined, complemented by a set of qualifiers (prefixes and suffixes), allowing to classify European humus forms and probably a large majority of humus forms known worldwide.
The principles of the classification, the diagnostic horizons and humus forms main references are presented at the General Assembly of the European Geosciences Union with the aim to stimulate members' curiosity. Interested people are invited to test the classification system in various field areas and to collaborate with the Humus group. Critical observations and field data/impressions are welcome as every other suggestions which can help in elaborating the 2013 version of the European humus forms classification.