

TDWG 2009 Annual Conference Program

This is an outline of the proposed programme that is being **updated regularly** by the TDWG 2009 Programme Committee.

Please be sure to look at the **Working Sessions** page to see details of the sessions planned for Tuesday, Wednesday (in parallel with Presentation Sessions) and Thursday.

Biodiversity Information Standards (TDWG) 2009 Conference

Sunday 8th November			Chair	Venue
1300-1700	1300-1800	Executive Committee (closed)	Donald Hobern	Joffre 4
	1600-1800	Registration		Joffre 1
Monday 9th November			Chair	Venue
WELCOME AND INTRODUCTIONS				
08:00-09:00	Registration			Joffre 1
09:00-09:45	Session 1 - Welcome and introductions to TDWG		Donald Hobern	Theatre Einstein
	0900-0910	Opening and Welcome	Donald Hobern	
	0910-0920	Housekeeping and Logistics	Adrian Rissoné	
	0920-0930	The Agropolis platform and the Montpellier biodiversity research community: overview (TBC)	Bernard Hubert	
	0930-0945	Biodiversity research and informatics in Bioversity International	Elizabeth Arnaud / Stephan Weise	
0945-1045	Session 2 - Report from Working Sessions e-biosphere		Cynthia Parr	Theatre Einstein
	0945-1005	Introduction	Walter Berendsohn	
	0955-1005	Action taken: GBIF's Position	Nick King	
	1005-1015	Spin-off: the British Roadmap	Frank Bisby	
	1015-1045	Discussion: Role of TDWG in the e-Biosphere Roadmap process	Walter Berendsohn et al	
1045-1115	Coffee			Joffre 1
1115-1215	Session 3 - Sharing e-knowledge on agricultural diversity worldwide		Theo van Hintum	Theatre Einstein
	1115-1130	Landscape of the information standards for plant genebanks	Theo van Hintum	
	1130-1145	Agropolis global presentation of PI@ntNet	Daniel Barthelemy	

1145-1200	Value of a coordinate: geographic analysis of agricultural biodiversity	Andy Jarvis		
1200-1215	CONABIO experience: Sharing e-knowledge, solutions and lessons learned	Patricia Koleff		
1215-1415	Lunch & Registration Restaurants in Montpellier Centre (not provided)			
1415-1515	Session 4a - Developing Global Networks		Éamonn Ó Tuama	Theatre Einstein
1415-1430	The Global Biodiversity Information Facility (GBIF): strategic objectives and perspectives	Nick King		
1430-1445	The Global Biodiversity Information Facility (GBIF): The decentralized architecture	Samy Gaiji		
1445-1500	The Global Invasive Species Information Network: Advances and Barriers	Michael Browne		
1500-1515	EDIT: experience and impact	Dave Roberts		
1515-1530	The GBIF Global Names Architecture	David Remsen, Markus Döring		
1530-1600	Coffee			Joffre 1
1600-1730	Session 4b - Ontology and Life Science Identifiers: The state of the play		Éamonn Ó Tuama	Theatre Einstein
1600-1615	Linked Data and the Semantic Web	Roger Hyam		
1615-1630	Vocabularies - managing them	Kehan Harman		
1630-1645	Outcomes of the GBIF LSID-GUID Task Group	Greg Riccardi		
1645-1700	The Life Sciences Identifiers Applicability Statement	Ben Richardson		
1700-1730	Discussion and roadmap for Workgroup Sessions	Adrian Rissone		
1800-2000	Welcome Reception			Joffre 1
Tuesday 10th November	Sessions 5-8 - Themed Working Groups (up to 6 in parallel) Please look at the Working Sessions page for details of proposed sessions		Venue	
0900-1030	Session 5 - Parallel Working Sessions		Salles Joffre	
1030-1100	Coffee		Joffre 1	
1100-1230	Session 6 - Parallel Working Sessions		Salles Joffre	
1230-1400	Lunch Restaurants in Montpellier Centre (not provided)			
1400-1530	Session 7 - Parallel Working Sessions		Salles Joffre	
1530-1600	Coffee		Joffre 1	
1600-1730	Session 8 - Parallel Working Sessions		Salles Joffre	
1730-1900	Local touristic visits (See pages on Montpellier)			
Wednesday	Sessions 9 - Conferences		Sessions 13-16 -	

**11th
November**

Theatre Einstein

**Working Sessions
see Working
Sessions page for
details**

0900-1030 **Session 9** - Presentations on the European Distributed Institute of Taxonomy (EDIT) Platform for Cybertaxonomy

Rooms Joffre - see
*the timetable of
working sessions*

Chair: Patricia Mergen

0900-0910 Taxonomic workflow in the EDIT Platform for Cybertaxonomy Andreas Kohlbecker

0910-0920 Introducing community single sign-on in EDIT Lutz Suhrbier

0920-0930 The Taxonomic Editor – more features less code Pepe Ciardelli:

0930-0940 Pan-European Species directories Infrastructure (PESI): Using the Common Data Model (CDM) to build Europe's largest species data base Marc Geoffroy

0940-0950 Crossmedia publishing with the CDM Niels Hoffmann

0950-1000 Integrating two major projects: Creating A Taxonomic E-Science (CATE) and the European Distributed Institute of Taxonomy (EDIT) Ben Clark

1000-1010 GeoSpatial? Components Pere Roca

1010-1020 Fieldwork today with data acquisition tools Alexander Kroupa

1020-1030 Discussion Patricia Mergen

1030-1100 Coffee

Sessions 10-12 - Conferences

**Sessions 14 -
Parallel Working
Sessions**

Joffre A

Theatre Einstein and
Joffre rooms - see
*the timetable of
working sessions*

1100-1230 **Session 10** - Miscellaneous Presentations (including Biocuration, Disease)

Chair: Annie Simpson

1100-1115 Semantic Web for Ecosystem Approach applied to Fisheries Julien Barde

1115-1125 Semantic Web discussion (all participants)

1125-1140 Catalogue of Life Phase 2 and the new 4D4Life Project Richard White

1140-1150 4D4Life discussion (all participants)

1150-1220 Integrating Animal Health and Biodiversity Informatics Standards Jim Case

1220-1230 Animal Health Standards discussion (all

participants)

1230-1400 Lunch - Restaurants in Montpellier Centre (not provided)

1400-1530 **Session 11** - Identifying Biodiversity for Food and Agriculture

Session 15 -
Parallel Working
Sessions

Chair: Doyle McKey?

Theatre Einstein and
Joffre rooms - see
*the timetable of
working sessions*

1400-1415 Sketches from an anthropologist's fieldnotes on local knowledge about agrobiodiversity: a primer for biodiversity information specialists Eric de Garine

1415-1430 Data integration and its impact on genebanks' databases Richards, Volk

1430-1445 Impact of Citizen Science projects on biodiversity policies: Tela Botanica conference results Elise Mouysset

1445-1500 New challenges for visual information retrieval in biodiversity applications Raffi Enficiaud

1500-1515 Semantic Standards for Genomic Analyses of Tropical Plants: the Generation Challenge Program Use Case Manuel Ruiz

1515-1530 The concept of "Networked collection" or "Virtual collection": revisiting the classical delineation between "in situ" and "ex situ" conservation and its consequences for database management Roland Bourdeix

1530-1600 Coffee

Joffre 1

1600-1730 **Session 12** - Accessing information on Agricultural genetic resources and crop wild relatives

Session 16 -
Working Sessions

Chair: Anne Zanetto

Theatre Einstein and
Joffre rooms - see
*the timetable of
working sessions*

1600-1615 A Global germplasm information system to unlock genebank information for use Michael Mackay

1615-1630 Online international genebanks' catalogues: SINGER and EURISCO Elizabeth Arnaud and Sonia Dias

1630-1645 The Crop Wild relative Portal: conservation and utilization of crop wild relatives - project with Armenia, Bolivia, Madagascar, Sri Lanka and Uzbekistan Imke Thormann

1645-1700 Fishbase and Sealife base, standards to go beyond the species level Nicolas Bailly

1700-1715 Accessing information on domestic animal diversity Beate Sherf

1715-1730 Integrating the monitoring of agricultural pests into biodiversity assessments Gail Kampmeier

1900-late!

Banquet (tickets in advance)
Mas du Ministre information Banquet menu

Mas du Ministre

Thursday 12th November	Sessions 17-20 - Themed Working Groups (up to 6 in parallel)		Venue <i>see the timetable of working sessions</i>	
0900-1030	Session 17 - Parallel Working Sessions		Salles Joffre	
1030-1100	Coffee		Joffre 1	
1100-1230	Session 18 - Parallel Working Sessions		Salles Joffre	
1235-1400	Lunch - Restaurants in Montpellier Centre (not provided)			
1400-1530	Session 19 - Parallel Working Sessions		Salles Joffre	
1530-1600	Coffee		Joffre 1	
1600-1730	Session 20 - Themes		Salles Joffre	
1800-1900	Lecture for students by Andy Jarvis, CIAT, Ebbe Nielsen Prize Climate change and agriculture: how models can guide our adaptation strategies		Montpellier SupAgro? Auditorium 208	
Friday 13th November	Sessions 17-20 Auditorium Einstein		Chair	
0900-1045	Session 21 - Reports from Working Sessions		Adrian Rissoné Theatre Einstein	
	0900-0915	Phylogenetics VoCamp	Hilmar Lapp	
	0915-0930	Theme #2 - Agriculture	Elizabeth Arnaud	
	0930-0955	Theme #1 - TDWG and e-Biosphere	Cynthia Parr	
	0955-1010	Theme #3 - Data Integration	Roger Hyam	
	1010-1045	Roundtable Discussion	Donald Hobern	
1045-1115	Coffee		Joffre 1	
1115-1300	Session 22 - Agriculture Information for development		Jean-Louis Pham Theatre Einstein	
	1115-1145	ARCAD project: Agropolis Resource Center for Crop Conservation, Adaptation and Diversity	Jean-Louis Pham	
	1145-1200	Sud Expert Plantes	Eric Chenin	
	1200-1215	Biodiversity Networks in Africa: from Knowledge Management to Technical and Institutional Implementation	Charles Kahindo	
	1215-1230	Plant Resources of Tropical Africa (PROTA): a tool for sustainable development	Michel Chauvet	
	1230-1245	Biodiversity informatics: key institutions, research and on-going projects in France	Gilles Boeuf	
	1245-1300	2010 - The Year of Biodiversity - outcomes of the round table	Lee Belbin	
1300-1430	Lunch & Business Session - Proposals for events in 2010- Year of Biodiversity Business Session in Theatre Einstein - Box lunch ordered and paid for in advance		Theatre Einstein	
1430-1515	Session 23 - Wild Ideas		Joel Sachs Theatre Einstein	
	1430-1445	Have Standards Enhanced Biodiversity Data? Global correction and acquisition patterns	Arturo Ariño	
	1445-1500	Late Semantic Binding in the SADI Semantic Web Services Framework	Mark Wilkinson	

			and Rutger Vos	
	1500-1515	Moving Biodiversity to the Cloud	Javier de la Torre	
	1515-1530	Do LSIDs Need to Resolve?	Joel Sachs	
	1530-1545	iCinema - Putting the WOW in biodiversity education and outreach	Paul Flemons	
1545-1615	Coffee			Joffre 1
1615-1700	Session 24 - Taking Data Integration forward & Wrap-up			Donald Hobern Theatre Einstein
	1615-1630	[reserved]	[reserved]	
	1630-1700	Roundtable Discussion	Donald Hobern	
1700	Close		Donald Hobern	Theatre Einstein

Conference Week	RELATED MEETINGS			TBA
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7/8 November	NESCent Phyloinformatics VoCamp - Session 1 VoCamp	Contact: Nico Cellinese		University of Montpellier
10/11 November	NESCent Phyloinformatics VoCamp - Session 2	Contact: Nico Cellinese		TBA

Saturday 14th November	EXCURSIONS and POST-CONFERENCE MEETINGS (See the Montpellier page in the Main Menu for details)			Meeting Location
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Saturday 14	0930-1300	A walk in the Botanic Gardens	Michel Chauvet	Leaving from the Corum
Saturday 14	0915-1715	In the heart of Camargue	Maxime Thibon	Leaving from the Corum

Monday - Friday	POSTERS			
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0830-1730	Senior Author	Title	Location	#
	Addink	4D4Life Integrated Development and Documentation Infrastructure for Sustainable Software Production	Joffre 1	1
	Appeltans	PESI: A European web portal for all species in Europe	Joffre 1	2
	Arnaud	Crop Ontology: knowledge modeling for traits description and ontology application for maize, wheat, chickpea, sorghum, Musa, potato and rice	Joffre 1	3
	Arnaud	SINGER, WEB CATALOGUE OF THE CGIAR SYSTEM WIDE INFORMATION NETWORK ON GENETIC RESOURCES	Joffre 1	4

Azard	TaxoBrowser?: a visual mashup for taxonomic browsing	Joffre 1	5
Beach	The Specify Collections Software: Cross-Platform, Open-Source, Collaborative, Robust, Localizable, Multi-disciplinary, Mature, Portable, and Free	Joffre 1	6
Braak	The GBIF Harvesting and Indexing Toolkit (HIT)	Joffre 1	7
Cartolano, Jr.	The Biodiversity Data Digitizer (BDD) tool	Joffre 1	8
Chavan	Global Biodiversity Resources Discovery System	Joffre 1	9
Coleman	STERNA Semantic Web-based integration of digital resources on birds	Joffre 1	10
Cryer	Building a scalable, open source storage solution for biodiversity data	Joffre 1	11
Cuadra	The GBIF Data Portal	Joffre 1	12
Deshayes	Development of open source software for the management of observational data	Joffre 1	13
Desmet	Canadensys : unlocking Canada's biological collection information	Joffre 1	14
Doring	The GBIF Integrated Publishing Toolkit	Joffre 1	15
Durand	Siregal: the INRA Plant Genetic Resources Information System, a GnpIS? module	Joffre 1	16
Engledow	Repatriating the Botany of Tropical Africa	Joffre 1	17
Fichtner	How to make the TDWG Ontology understandable for experts of other scientific and scholarly domains?	Joffre 1	18
Gaisberger	Scanning and Passport Data Extraction from Bioversity - Collecting Mission Reports and Related Documents	Joffre 1	19
Heintz	Ca-SIF: A SHARED AND STANDARDIZED CATALOGUE TO PROVIDE INFORMATION ON FOREST ECOSYSTEMS	Joffre 1	20
Jameson	The Biofinity Project: Transforming Biodiversity Research	Joffre 1	21
Jongman	EBONE? a project to design and test a European biodiversity observing system, integrated in time and space	Joffre 1	22
Julien	Semantic data integration for the analysis of the genetic diversity of plants	Joffre 1	23
King	Automatic Biodiversity Literature Enhancement	Joffre 1	24
Laporte	TermForm? : an online Web application to define and share concepts for the development of a trait-based ontology	Joffre 1	25
Larmande	Orylink	Joffre 1	26
Laurenne	LSIDs for managing biological names in data integration	Joffre 1	27
Maiocco	Guideline to edit online keys	Joffre 1	28

McIver?	Composition Assistance for Multiple Existing Scientific Workflow Systems	Joffre 1	29
Mergen	The importance of a good balance between physical collection management and digitisation. How SYNTHESYS aims for a benchmark standard throughout Europe	Joffre 1	30
Moen	An Application Profile Using Darwin Core Rendered in the New Dublin Core Application Profile Framework	Joffre 1	31
Ó Tuama	GBIF – helping to build a Global Spatial Data Infrastructure	Joffre 1	32
Parr	The Future of EOL: Phase II Implementation	Joffre 1	33
Penev	At the frontline of publishing in systematic zoology: ZooKeys?	Joffre 1	34
Pommier	Ephesis : Environment and Phenotypes Information System, a GnpIS? module	Joffre 1	35
Remsen	The Global Names Architecture: an integrated and federated approach to enabling discovery and access to biodiversity information.	Joffre 1	36
Ruas	The Musa Germplasm Information System Enhancing knowledge on the Musa diversity	Joffre 1	37
Sahl	eRelevé: a suite of solutions for biodiversity data management	Joffre 1	38
Saraiva	Interaction Extension, a Darwin Core Extension to interaction between specimens	Joffre 1	39
Sarmiento	Pl@ntWood: A computer-assisted identification tool for 110 species of Amazon trees based on wood anatomy	Joffre 1	40
Schneider	The Diversity Workbench Framework: The Synchronization Process in DiversityMobile?	Joffre 1	41
Sherf	Domestic Animal Diveristy Information System - A clearing house mechanism	Joffre 1	42
Smales	Biodiversity Heritage Library for Europe – Interoperability of European biodiversity digital libraries	Joffre 1	43
Stevenson	Using the Electronic Field Guide Project's software to make digital guides	Joffre 1	44
Stewart	Lifemapper: Finding the Good Life	Joffre 1	45
Suhrbier	EDIT Community Single Sign-On	Joffre 1	46
Theeten	ENHANCING THE ACCESS AND PUBLICATION OF BIODIVERSTY DATA IN CENTRAL AFRICA: THE CABIN TECHNICAL INFRASTRUCTURE	Joffre 1	47
Thibon	AfriBes?-Towards a social network of scientific and technical information for Africa	Joffre 1	48
van Strien	Crop science and breeding: contributions in the fields of bioinformatics by the Generation Challenge Programme for the resource poor	Joffre 1	49
Wang	Capabilities and interfaces of a prototype Filtered Push network	Joffre 1	50
Weiss	The Diversity Workbench framework as data	Joffre 1	51

repository for biological data

White 4D4Life Work Package 7: Serving user needs with a new system architecture for the Catalogue of Life Joffre 1 52

**Monday-
Wednesday**

COMPUTER DEMONSTRATIONS

0900-1730	Authors	Title	Location	#
	Best, Moen, Neill	A Framework and Workflow for...	Joffre 1	1
	Caballier	TaxoBrowser?: a visual mashup for taxonomic browsing	Joffre 1	2
	Deck	The Moorea Biocode Project: Tracking Barcoded Specimens From Collecting Event to Sequence	Joffre 1	3
	Duche	eFlore: An Electronic Flora	Joffre 1	4
	Giddens	Using Citizen Science to Process Digital Herbarium Labels	Joffre 1	5
	Grard, Bonnet, Prosperi, Le...	A graphical system for computer-assisted plant identification	Joffre 1	6
	Lyal, Weitzman	Maximising the potential of digitised literature-INOTAXA prototype and TDWG standards	Joffre 1	7
	Parr, Leary	The Encyclopedia of Life: Pathways to contribution	Joffre 1	8
	Sautter, Agosti, Catapano, Morris	Plazi: Building Communities and Software for Increasing the Utility of Digitized Biodiversity Publications	Joffre 1	9
	Scott, Soh, Moriyama, Ocampo,...	The Biofinity Project: An Extensible Semantic Bridge between Biodiversity and Genomics	Joffre 1	10
	Senger, Shrestha, Arnaud	GCP Crop Ontology Browser	Joffre 1	11
	Škofič, Dias	EURISCO - The European Plant Genetic Resources Search Catalogue	Joffre 1	12
	Thau, Bowers, Ludäscher	CleanTax?: An Integrated Framework for Mapping Biological Taxonomies and Merging Taxonomically Organized Presence/Absence Data Sets	Joffre 1	13
	Tobler, Janovec, Best, Neill, Webber	The Atrium Biodiversity Information System: sharing, managing, analyzing, and disseminating biodiversity data	Joffre 1	14
	Ung, Vignes-Lebbe	Become an e-Taxonomist with Xper ²	Joffre 1	15
	Walisch, Colling, van Breda	A biodiversity cartography portal for nature conservationists, scientists, and naturalists	Joffre 1	16

Working Sessions

This page shows the status of the programme for the working group/hackathons parallel sessions. It is a work in progress by the [Programme Committee](#) for TDWG 2009. Comments and feedback can be added via the previous link.

Working Sessions

Theme #1: e-Biosphere Follow-up

Item	Leader	Description
Roundtable: potential events for 2010 - the Year of Biodiversity	Lee Belbin	It would seem a pity if the international group developing standards for sharing biodiversity data didn't do something special in the Year of Biodiversity. Wouldn't it? If you agree, what few things should TDWG (you) be doing in 2010 to save the planet? Please bring along ideas to discuss and decide.
Citizen Science	Joel Sachs	This will be an informal session. We'll start with a short presentation cobbled together from slides contributed by people unable to attend, and then will craft a discussion agenda for the remaining time. Discussion topics can be suggested in advance, or during the session. Things I'd like to address include: i) making citizen science data standards compliant, according to appropriate definitions of "standards" and "compliance", and ii) using twitter vs. developing custom mobile apps. Other possible topics include grass-roots activities; integrating activities; tool development; use of Web 2.0; and visions for the future.

Theme #2: Agricultural Biodiversity

Item	Leader	Description
Herbarium digitization	Eric Chenin, Pascal Chesselet	Herbarium collections have a special place in Natural History collections, as plants have in ecosystems, and herbarium specimens have specific technical characteristics that facilitate their digitization. Digitization is here understood as including both label data capture and sheet image scans: both forms of information are useful and complement each other. The session will consist of approximately 4-5 brief presentations from herbarium digitization projects, and about tools and methodologies. Discussions will address a number of practical issues such as appropriate collections management software (e.g. RIHA, KE Software), the role of digitization in specific herbarium management issues, standards (or the lack of) for specimen imaging, standards for person's names (authors of plant names, plant collectors and determiners of plant names) and the constraints and possibilities of georeferencing and mapping label data. To complement and speed up routine (e.g. loans-driven) and project-driven (e.g. type specimens) herbarium digitization, accelerated metadata capture will be discussed with the aim to establish and re-enforce cross-institutional priorities (potential outcome for herbarium digitization workshop). The workshop will explore the potential for metadata to foster the use of herbarium collections in providing answers to scientific and operational questions, and attract funds to enhance and accelerate unit level digitization. Discussions will also address the specific issues of developing countries. [expect 20 p; should not overlap with; Gregor Hagedorn - Biological Descriptions Interest Group]
DarwinCore? Germplasm Extension and its deployment in the GBIF Integrated Publishing Toolkit	Dag Terje Filip Endresen, Samy Gaiji, Tim Robertson	DarwinCore? is designed around a set of general terms (the core) applicable for most unit-level biodiversity datasets. DarwinCore? also implements extensions to the core terms, designed to include terms of more specific utility in particular thematic domains – such as for example the community for plant genetic resources. The DarwinCore? Germplasm Extension has been developed to include the additional terms required to describe germplasm samples maintained by genebanks worldwide. This working session will focus on the further development of the Darwin Core Germplasm Extension. We will also cover the building of any extension and the implementation of new extensions in the GBIF

		Integrated Publishing Toolkit (IPT), depending on the interests expressed by the working session participants.
Species Profile Model (SPM) III: Visual and textual standards for taxonomic identification	Pierre Grard, Pierre Bonnet	Species identification tools using morphological, geographical and ecological characters have made many advances since few years. Increasing use of molecular and non-morphological characters require new combinations of these different approaches. Several attempts have been made to use visual and graphical representations of morphological identifications characters. This working session will focus on the interaction of the different ways (or tools) to identify plants, and complementarities between them.
Standards for plant traits (cultivated and wild) - expanding standards to include characterization and evaluation data, phenotypic descriptors	Michael Mackay	Phenotypic data adds a new level of complexity to the management of accession level data in ex situ genebanks of plant genetic resources for food and agriculture (PGRFA). It is recognized that standards for passport data (accession identity) need to be quite stringent to facilitate correct identification. However, in the case of phenotypic data, the standards need to be more flexible to allow the different legitimate methods scientists use to evaluate the same trait as well as having multi-site observations. This working session will introduce and explain the current structure used to manage phenotypic data in the global portal; a collaborative project between Bioversity International (Bioversity), the Global Crop Diversity Trust (GCDT) and the Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture (Treaty). The development of the global portal is an iterative process that is addressing the need for a global information system referred to in Article 17 of the Treaty. In addition to introducing the current structure and design, the working session should identify some of the minimum method and location metadata descriptors required to support flexible phenotypic data. The current prototype global portal contains 1.2 million accession records for the 22 ITPGRFA Annex 1 crops in addition to some 3 million phenotypic data records, so it provides a substantial background on which to further develop standards for publishing phenotypic PGRFA data.
Data integration enabling an ecosystem approach for the management of Genetic resources - integrating multilayers databases - Management of Animal, Aquatic, microorganisms and plant genetic resources	Nicolas Bailly (TBC)	Integrating multilayers databases - Management of Animal, Aquatic, microorganisms and plant genetic resources
Crop trait Ontology	Rosemary Shrestha, Elizabeth Arnaud	The Crop ontology is a recent project launched by CGIAR centers attempting to model the knowledge needed for the description of a crop trait in a given observation environment, for specific characters and measurements. It is a necessity to collaborate with related ontologies like ENVO, Plant Ontology, Trait Ontology (Cornell University), the Crop Wild relative ontology, the FAO agriculture ontology. Ontology is used in applications for Biocuration of databases- Presentations of Crop ontology, Ontology Look up service, Envo. The Environment Ontology and Terminizer (dept. Of Computer Science in University Of Manchester) tool assisting in the detection of ontological terms found in free text . Will be discussed: The challenges of developing a Crop trait ontology and motivate communities of practice to apply (Breeders, collection curators, etc) - the patterns of collaboration between the ontologies relating to the concerned knowledge domain - the application of the Ontology in databases and data entry wizard and the use of tools for a dynamic Ontology curation and development - Participants will actively share their experience and suggestions.
Biocuration in Agricultural related databases - Standards and	Elizabeth Arnaud	Biocuration : the newly founded International Society for Biocuration (ISB) defines it as follows: ' Biocuration involves the translation and integration of information relevant to biology into a database or resource that enables integration of the scientific literature as well as large data sets. Accurate and comprehensive representation of biological knowledge, as well as easy access to this data for working scientists and a basis for

tools for Data quality process		computational analysis, are primary goals of biocuration. The goals of biocuration are achieved thanks to the convergent endeavors of biocurators, software developers and researchers in bioinformatics. Biocurators provide essential resources to the biological community such that databases have become an integral part of the tools researchers use on a daily basis for their work. ` Ontology is a fundamental tool for Biocurators to annotate data and tag literature in order to link these pieces of information and enrich the data sets. Biocuration notion was generated from the public molecular databases. What curation processes are then possible for agro-databases? Participants will share their experience about the curation of databases and others.
Agricultural biodiversity informatics: Research infrastructure - Development of a research infrastructure for agricultural biodiversity informatics	Éamonn Ó Tuama	CANCELLED
Wildlife disease and veterinary informatics: Integrating Animal Health and Biodiversity Informatics Standards	Josh Dein, James Case, Jeff Wilcke	The purpose of this session is to bring together individuals engaged in data standards development for veterinary medicine with those who are interested in the inclusion of disease related information in biodiversity databases. We will begin with two broad overview presentations, one each in medical and biodiversity informatics, to introduce the basic concepts and tools in each area to those in attendance who are unfamiliar with the other discipline. They will set the stage for a working group session for more detailed discussions on the likely mechanisms for integration of standards and systems. Hopefully, this will lead to longer term collaborations through one or more of the existing TDWG Interest Groups. [Must take place by Wed. PM at the latest.]
Species-related databases, information systems and inventories of cultivated and useful plants	Michel Chauvet	Many attempts have been made in the past to compile online and printed inventories of useful and/or cultivated plant species. They differ in thematic and geographical scope, and in database structure. In an era when sustainable development is high on the political agenda, a comprehensive system of information about plant resources of the world is badly needed. It should encompass agronomical as well as botanical data and cover all the kinds of uses. Such a challenge can be reached only by a collaborative effort, involving sharing tasks, implementing standards, promoting interoperability and exchanging data sets. An overview will be given of the various existing inventories and information sources dealing with useful and/or cultivated plant species. The working session is aimed at discussing the ways and means to improve the situation and to better meet the needs of users, and at completing the overview of existing databases and inventories.
Indigenous knowledge	Doyle Mc Key	Indigenous knowledge about biodiversity can make important contributions to its conservation. This is particularly so for domesticated plants and animals: people created their biodiversity and the dynamic management of traditional farmer continues to shape it. Ever since the 1992 Rio "Earth Summit", there has been a mandate to value, to conserve and to use indigenous knowledge about biodiversity. This entails circulation and sharing of this knowledge. The global use of local knowledge presents epistemological, methodological and ethical challenges. Indigenous knowledge is part of a system that is logical in its local context. Can locally pertinent knowledge be transcribed and used in other contexts? Can local knowledge systems yield independent, transportable pieces of information? Indigenous knowledge can be viewed as intellectual property. What constitutes informed consent from its holders that it be circulated and shared? For whose use are databases of indigenous knowledge intended, and for what purposes? What are the effects of the process of obtaining, circulating and using this knowledge, on the local systems that have generated it?
(1) Standards for plant traits, (2) DarwinCore? germplasm extension (3) Crop trait ontology : joint discussion	Theo Van Hintum	Joint discussion about the outcomes of the three previous sessions: Crop trait ontology, standards for plant traits and DarwinCore? germplasm extension.. Participants of the 3 sessions are welcome to attend this session to share their feedback and views to draw suggestions and recommendations on standards for plant traits and the potential for creating an interest group in TDWG.

Theme #3: Data Integration

Item	Owner	Description
The TDWG ontology (Closed Session - by invitation: Planning)	Donald Hobern	Preparation for the open working session "Development of TDWG ontology"
Development of TDWG ontology (Open Session)	Donald Hobern	The goal of biodiversity informatics is to liberate information from all sources to support any activity dependent on understanding the world's biodiversity. The complexity of this task, encompassing significant heterogeneity both in information sources and in use cases, indicates the need for clear communication on the contents and origins of each data set. This communication depends on shared understanding of the subject domain and the use of consistent ways to model and present data. Over recent years TDWG has been working to develop a general ontology for biodiversity data incorporating domain knowledge from existing TDWG standards. We need to progress this work to provide a common shared model for biodiversity projects to exchange and integrate data. Such a model was identified at e-Biosphere as one of the major requirements within international biodiversity informatics. These sessions will explore the current state of the TDWG ontology, provide a forum for discussion of requirements and issues, and allow TDWG to progress this work towards its presentation as a draft standard.
The TDWG ontology (Closed Session - by invitation: Roadmap)	Donald Hobern	Follow-up of the open working session "Development of TDWG ontology"
GBIF LSID-GUID task Group	Greg Riccardi, Éamonn Ó Tuama	Outcomes of the GBIF LSID-GUID Task Group
Biological Descriptions Interest Group/Species Profile Model	Cyndy Parr, Gregor Hagedorn	<p>Part 1: Summary descriptions about species: e.g. Species Profile Model.</p> <p>SPM is being developed to enable sharing and integration of high level summaries about the natural history, life history, and other biology of organisms. Several speakers will be asked to share their experiences to date using the SPM on projects such as EOL and Plazi. Recommendations for changes to SPM will be made, and discussed, and an action plan for proposal as a standard will be developed.</p> <p>Part 2: Identification keys, software, platforms, and future directions.</p> <p>The workshop will start with brief presentations and project updates from various projects or organisations involved in the creation and management biological descriptions. The main part will be devoted to general discussions about future directions, where synergies between projects could be found, and what the future direction of the BDI group in general are.</p>
Invasive Species Interest Group - Inserting/testing GISIN models in GBIF IPT	Annie Simpson, Jim Graham, Michael Browne	The Global Invasive Species Information Network (GISIN) provides a platform to share invasive species information via the Internet and other digital means. This working session will provide a brief overview of the GISIN's TAPIR-compliant system to cross search disparate invasive species information systems on the Web, review user needs, and break up into subgroups to perform some of the following tasks (depending upon participants' interests and skills): 1) brainstorm all the problems we think data providers will have and then talk about how to help them; 2) map the GISIN protocol elements to the GBIF Integrated publishing toolkit; 3) brainstorm about which of the available online information systems, based on their content and IT configuration, would be the highest priority to add as data providers; and 4) determine which users manuals are needed and begin to outline their content. The various results of the session will be published on the site at GISIN.org and on the TDWG invasive species Wiki.
Wiki publishing workshop	Gregor Hagedorn	Most web publishing and data management frameworks are centered on the presentation and management needs of big organizations. While there is a need for this, it doesn't reflect the traditional, peer-based publishing and recognition system in science. Most scientists are at the mercy of commercial publishers with little options to employ open content licenses like Creative Commons. Formats like taxon mini-reviews are particularly ill served in the conventional publishing industry.

		<p>"Web 2.0" is successful with peer-based, self-organizing systems with minimal hierarchy. A general prejudice is that this approach has little value as data. While largely true for the word processor-to-PDF workflow, this is not a necessity. The object-oriented wiki-approach offers free form as well as structured and reusable (e. g. in DBPedia and Open Data Linking projects) data. Semantic Media Wiki could even bring the benefits of the semantic web and rdf-based ontologies within the reach of many biologists.</p> <p>The workshop will show examples of integrating free-form text with wiki-document based structured data for identification keys to show the potential of the wiki technology.</p>
Phylogenetic Nomenclature and RegNum? Development	Nico Cellinese, Torsten Eriksson, Kate Rachwal	<p>The PhyloCode? is a formal set of rules governing phylogenetic nomenclature. The Code is designed to name the parts of the tree of life by explicit reference to phylogeny. The emphasis of the workshop is to provide participants the opportunity to learn about the different types of phylogenetic definitions and how they are constructed. The PhyloCode? requires that phylogenetic definitions are registered in a public repository. RegNum? (http://regnum.ebc.uu.se/) is a web-based name registration database that serves as the repository of clade names and phylogenetic definitions. Current development in Ruby-on-Rails and integration with other resources such as TOLKIN (www.tolkin.org) and TreeBASE? (www.treebase.org) will be presented and discussed with the participants. This workshop is an activity of the TDWG Interest Group on Phylogenetics Standards (http://wiki.tdwg.org/Phylogenetics)</p>
Name Matching Workshop - Discuss ways to achieve name matching, look at possible integration of these services	Dave Remsen	<p>Two main areas of focus: 1. Matching authorship ; we have a tool that does it but haven't tied it to our new generation of name recognition tools; 2. Names discovery; finding novel names consisting of higher taxa, genera and epithets that are not in an existing lexicon</p>
Roadmap for integrating and scaling geospatial biodiversity data	Reed Beaman, Javier de la Torre	<p>The ability to integrate large scale geospatial data with a broad range of biodiversity information poses a current challenge to the informatics community. Multiple international efforts (some collaborative) are engaged in developing tools and resources for data access, management, analysis, and visualization. There is an ongoing need to maintain an international forum for discussion and a longer-term roadmap that integrates with efforts of e-Biosphere, GBIF, EOL, WCMC, GEO BON, and a host of national and regional efforts. Many of these are not focused on geospatial data, but on all aspects of biodiversity science, yet they share a common need for expertise and applications that handle the complexities of geospatial data integration. GBIF is hosting a "Strategic Applications" workshop in September 2009, in which Javier de la Torre is a participant, that presents several projects and initiates a discussion of geospatial data requirements. The TDWG conference provides an ideal venue for continuing and broadening participation in this discussion and establishing task groups that can collaborate on further developing use cases, ontologies, and implementing scalable geospatial tools, middleware, and resources that can benefit the biodiversity community.</p>
Harnessing the long tail: small biodiversity data publishers	Vishwas Chavan	<p>Discuss the tools, standards and processes to create hassle free environment for small publishers</p>
Multimedia Resources Metadata Schema	Vishwas Chavan, Robert Morris	<p>The Multimedia Resources Metadata schema ("MRTG schema") is a set of representation-neutral metadata vocabularies for describing biodiversity-related multimedia resources and collections. The MRTG standard is the culmination of work on multimedia resource descriptions carried out by participants from Key To Nature, the NBII Digital Image Library, MorphBank?, and others, together with input from a number of other stakeholder communities including Encyclopedia of Life (EOL), the Biodiversity Heritage Library (BHL) and UMASS-Boston. The Global Biodiversity Information Facility (GBIF) commissioned the 'Multimedia Resources Task Group (MRTG)' in March 2008 and the Group was approved in December 2009 by Biodiversity Information Standards (TDWG) as the 'Joint GBIF-TDWG Task Group on Multimedia Resources in Biodiversity'. The standard was developed by the Joint GBIF- TDWG Multimedia Resources Task Group to fit with the suite of data standards being developed on behalf of the Global Biodiversity Information Facility (GBIF) by Biodiversity Information Standards (TDWG). During this session we intend to discuss the schema, its usefulness and improvisation, before it is ready for formal ratification by TDWG.</p>
Global Names	Rich Pyle	<p>Almost all information related to biodiversity is, in one way or another, associated with a</p>

Architecture		scientific name. For more than two and a half centuries, biologists have assigned formal scientific names to organisms as a way to facilitate communication. It is often suggested that scientific names are the "glue" that binds all biodiversity information. This session will include a description of the emerging "Global Names Architecture" (GNA), an effort to establish a common infrastructure for cross-linking biodiversity datasets through scientific names; as well as its two primary data components, the Global Names Index (GNI), and the Global Names Usage Bank (GNUB). The majority of this session will be reserved for open discussion about the scope and implementation of GNA, GNI and GNUB, and the services needed to put them to effective use for linking existing datasets via scientific names.
Linked Literature	Chris Freeland	Discussion & demonstration of how nomenclators can connect into a literature resource like Biodiversity Heritage Library.
Annotations of Biodiversity Records and Datasets	James Macklin, Paul Morris, Robert Morris	<p>Annotations of data records serve a number of important functions. Annotations may signal opinions that records or datasets have been superseded by other data, that they represent logically or statistically inconsistencies either internally or with respect to other data, or simply that there are related data which consumers may find relevant to their use of the given data. Annotations thus form an additional kind of record-level metadata, in a form which can be provided by third parties, and which itself can be annotated, giving rise to what amounts to a digitized discussion of the primary data.</p> <p>The session will consist of approximately 4-5 brief presentations from projects that already have in place demonstrable software that addresses any of the above purposes of annotations or any other purposes as may plausibly meet the informal notion of a digitized discussion of primary data. At the end of the session, the moderator will summarize common or otherwise important points, and will lead a discussion designed to lead to a proposal to form a TDWG Annotation Interest Group.</p>
Infrastructure for storage and exchange	Phil Cryer, Anthony Goddard	Discuss hardware and software systems required for global, redundant storage to facilitate data exchange and integration.
Prioritizing digitalisation and adding value to collections using collection metadata	Thierry Bourgoin	<p>Objectives of the working session are:</p> <ol style="list-style-type: none"> 1) To publicise the need for collection metadata for prioritizing - and therefore optimizing - the digitalisation effort of collection specimens, and to stress on their importance in adding value to collections by facilitating accessibility to primary data. 2) To set up a metadata capture template, and 3) To discuss and select the various fields documenting these metadata while maintaining the template as simple as possible. <p>This session should take place in the frame of reflexion carried out by the GBIF Task Group on the Global Strategy and Action Plan for the Digitisation of Natural History Collections (GSAP-NHC) and will serve to investigate further this new concept, particularly how to implement it more concretely.</p> <p>Four shorts communications of 10 minutes each are planned:</p> <ul style="list-style-type: none"> - Why collection digitalisation is important? Thierry Bourgoin - The collection metadata concept. Walter Berendsohn - How to proceed? James Macklin - Setting up a template - link with the GBIF Global Biodiversity Resources Discovery System (GBRDS) and GBIF Metadata Catalogue. Vishwas Chavan <p>These will be followed by an open discussion about the different kinds of fields that will have to be tracked and which standards they should have to follow. The session should conclude with a series of concrete recommendations that will serve pilot projects already identified during the Leiden meeting of the Society for the Preservation of Natural History Collections, 6-11 July 2009, to start testing the concept in real length. The session would also address the question whether the 'Natural Collections Descriptions' or any other schema could be adopted or needs specific alterations.</p>
Phylogenetics VoCamp	Nico Cellinese, Karen Cranston, Hilmar Lapp, Sheldon MacKay, Enrico Pontelli,	Integrating diverse biological data with the historical process of evolution is a grand challenge for 21st century biology. A technology infrastructure that can achieve the necessary interoperability of data and software from diverse fields requires formalized, shared vocabularies as one of its key components. Developing such vocabularies and ontologies is a community project. To this end, the "Phyloinformatics VoCamp" aims to connect previously disparate ontology development efforts, stakeholder communities, and interoperability initiatives with shared objectives. Aside from sharing knowledge, expertise, and best practices, existing ontology resources will be extended in a hands-on manner to improve ontological rigor, semantic richness, and support for reuse. Some participants will also be programming proof-of-concept applications that directly apply the

	Arlin Stoltzfus	ontologies being developed. The VoCamp is part of the Phylogenetics Standards Interest Group activities, and is sponsored by the National Evolutionary Synthesis Center (NESCent: http://nescent.org), with additional support from TDWG and LIRMM (http://www.lirmm.fr/xml/fr/lirmm.html) (University of Montpellier).
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EDIT

Item	Leader	Description
EDIT tutorial for programmers - CDM Library	Andreas Kohlbecker	The workshop addresses programmers interested in the technology of the EDIT Platform for Cybertaxonomy and how it can be deployed for building new or extending existing applications. In particular, the EDIT CDM-library as well as its associated web-service layer will be introduced.
EDIT tutorial for users (e.g. Taxonomic Editor, specimen search, Geo-tools)	Pepe Ciardelli	The EDIT User workshop gives a practical introduction to the different user tools and applications associated with the EDIT Platform for Cybertaxonomy ranging from setting up CDM stores and using the Taxonomic Editor to specific tools for searching specimen data as well as creating distribution maps.
EDIT Scratchpads tutorial	Dave Roberts	<p>In this session we will provide a developer level overview of the Scratchpad project including information on hosting a Scratchpad server, extending the Scratchpad functionality through modules including integration with other projects. The session will take the form of an overview presentation, followed by a question and answer session on the following topics:</p> <ul style="list-style-type: none"> - Scratchpad server installation (source, RPM or DEB) - Code repositories and module installation/updates (http://drupal.org, SVN, http://home.scratchpads.eu) - Site installation profiles - Taxonomy management - Mirroring - Future directions (ViBRANT?- Virtual Biodiversity Research and Access Network for Taxonomy)

Other topics

Item	Leader	Description
Literature Group: continue working on standard development	Anna Weitzman	<p>During the 2009 Literature working session, interested delegates, will meet to work on four topics:</p> <p>A. Literature citations standards</p> <ol style="list-style-type: none"> a. Finalize and approve existing draft standards. b. Decide on a process to move them to RDF (this needs someone who knows RDF). c. Decide on a timeline and responsibilities for entering them into the formal TDWG Standards Process. <p>B. Taxonomic literature content standard (a proposed standard for delivery of taxonomic literature -- retrospective and prospective).</p> <ol style="list-style-type: none"> a. Final decision on a model for standard (i.e., an extension to the NLM DTD or a free standing standard in XML and/or RDF; is RDF even relevant for this kind of standard). b. Draft standard during meeting.? Set timeline and responsibilities for future work. <p>C. Vocabulary standards for disambiguation of components of taxonomic literature</p> <ol style="list-style-type: none"> a. Which and how to update and deliver (electronically) existing (prior) TDWG standards (Authors of Plant Names; Botanico-periodicum-huntianum and Botanico-periodicum-huntianum Supplementum; Index Herbariorum; and Taxonomic Literature, ed. 2 and its Supplements (14 volumes total) b. Additional standards needed, proposals for building and delivering those vocabularies.

		<p>c. A strategy and timeline for moving the above and making useful ways of creating and delivering disambiguation services needed in taxonomy.</p> <p>D. Discussion of progress on existing literature projects (e.g., BHL, INOTAXA, Plazi, and others as requested).</p>
Intellectual property rights on databases - Issues and solutions (creativecommons, scienceincommon, etc)	Maxime Thibon	CANCELLED
Discussion of frameworks, workflows, and processes in relation to analysis of biodiversity data	Paul Flemons	<p>There are a number of large biodiversity informatics projects proceeding around the world at the moment, such as EDIT and ALA, that will be incorporating sophisticated spatial data analysis tools for use in biodiversity research and assessment. It would be very useful to have a standard framework or approach to implementing these tools so that components could be shared effectively and efficiently between projects. Though standards exist for various parts of the process for these tools (such as data inputs and transfer - eg Darwin Core, WFS, WMS, WCS) there is no comprehensive standard or group of standards for the architectural frameworks or protocols that could enable such sharing of components between projects.</p> <p>This working group will provide opportunity for participants to present for 5 to 10 minutes on work they are doing or planning to do or on issues and problems that they would like to address during the workshop. The aims of the workshop will then be finalised and informal discussion used to explore ideas, opportunities and issues encountered by participants in developing spatial analysis tools. At the very least the working group will provide a forum for robust exchange of ideas and experience. An optimal outcome would be a draft set of standard components and protocols which would provide a basis for further development of required standards in the coming months and years.</p>

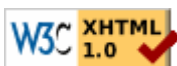
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Working Schedule

TDWG 2009 Working Sessions Schedule

A list of delegates for each session can be found here: [TDWG 2009 Session Participant List](#)

Please note that only delegates who submitted the Session Selector before the deadline are included.

Tuesday 10 November - Sessions 5-8

Time	Joffre A1	Sully 3	Joffre B	Joffre C+D	Joffre A2	Joffre 5	Joffre 1
0900-1030	TDWG Ontology - Planning (closed session - by invitation only, D. Hobern)	Crop trait Ontology (R. Shrestha, E. Arnaud)				VoCamp	Poster viewing
1030-1100	Coffee						
1100-1230	Harnessing the long tail: small biodiversity data publishers (V. Chavan, E. Ó Tuama)	Development of TDWG Ontology (open session, D. Hobern)	Biocuration in agrodatabases (E. Arnaud)	Biol. Descr. Int. Grp/Species Profile Model I (BDI/SPM I) (C. Parr, G. Hagedorn)	Literature Group I (A. Weitzman)	VoCamp	Poster viewing
1230-1400	Lunch						
1400-1530	Invasive Species I: GISIN cache system, file upload, and toolkit issues. (A. Simpson, J. Graham, M. Browne)	Collection Metadata I (T. Bourgoïn)	BDI/SPM II (C. Parr, G. Hagedorn)	Species-related databases, information systems and inventories of cultivated and useful plants (M. Chauvet)	Literature II (A. Weitzman)	VoCamp	Poster viewing
1530-1600	Coffee						
1600-1730	Invasive Species II: GISIN cache system, file upload, and toolkit issues. (A. Simpson, J. Graham, M. Browne)	Name matching workshop (D. Rensen)	Collection Metadata II (T. Bourgoïn)	SPM III: Visual and textual standards for taxonomic identification (P. Grard, P. Bonnet)	Literature III (A. Weitzman)	VoCamp	Poster viewing

Wednesday 11 November - Sessions 13-16

(in parallel with Presentation Sessions 9-12 in the Theatre Einstein)

Time	Joffre 5	Joffre C+D	Joffre B	Joffre A	Einstein	Joffre 1
0900-1030	VoCamp			Wiki publishing workshop (G. Hagedorn)	SESSION 9: Presentations on EDIT (P. Mergen)	Poster viewing
1030-1100	Coffee					
1100-1230	VoCamp	Multimedia resources schema		SESSION 10: Miscellaneous	Roadmap for integrating and	Poster viewing

		(V. Chavan, R. Morris)		Presentations (A. Simpson)	scaling geospatial biodiversity data I (R. Beaman, J. de la Torre)	
1230-1400	Lunch					
1400-1530	VoCamp	Annotations (J. Macklin)	Wildlife disease and veterinary informatics (J. Dein, J. Case, J. Wilcke)	SESSION 11: Biodiversity for Food and Agriculture Presentations (D. Mc Key)	Roadmap for integrating and scaling geospatial biodiversity data II (R. Beaman, J. de la Torre)	Poster viewing
1530-1600	Coffee					
1600-1730	VoCamp	Frameworks, workflows, and processes in relation to analysis of biodiversity data (R. Flemons)	Indigenous knowledge (D. Mc Key)	SESSION 12: Agri-genetic resources and crop wild relatives Presentations (A. Zanetto)	Global Names Architecture (GNA) (R. Pyle)	Poster viewing

Thursday 12 November - Sessions 17-20

Time	Joffre 5	Joffre C+D	Joffre B	Joffre A	Joffre 1
0900-1030	European Distributed Institute of Taxonomy (EDIT) Scratchpads (D. Roberts)	Infrastructure for storage and exchange (P. Cryer, A. Goddard)	Citizen Science (J. Sachs)	Linked literature: how nomenclators can connect into a literature resource like Biodiversity Heritage Library (C. Freeland)	Poster viewing
1030-1100	Coffee				
1100-1230	European Distributed Institute of Taxonomy (EDIT) for programmers (A. Kohlbecker)	DarwinCore Germplasm Extension and GBIF IPT deployment (D.T.F. Endresen, S. Gaiji, T. Robertson)	Roundtable: potential events for 2010 - the Year of Biodiversity (L. Belbin)	Standards for Plant traits (cultivated and wild) - expanding standards to include characterization and evaluation data, phenotypic descriptors (M. Mackay)	Poster viewing
1230-1400	Lunch				
1400-1530	(1) Standards for plant traits, (2) DarwinCore germplasm extension, (3) Crop trait ontology: joint discussion (T. van Hintum)	GBIF LSID-GUID (Unique Identifiers) report (G. Riccardi)	European Distributed Institute of Taxonomy (EDIT) for Users (P. Ciardelli)	Phylogenetic nomenclature/RegNum (N. Cellinese, K. Rachwal)	Poster viewing
1530-1600	Coffee				
1600-1730	Ecosystem approach to genetic resources management (N. Bailly)	Herbarium digitization (P. Chesselet)	Literature IV (A. Weitzman)	TDWG ontology - Roadmap (closed session - by invitation, D. Hobern)	Poster viewing