# INTERNATIONAL CONFERENCE AND WORKSHOP

# Soil Classification: a powerful tool for planning Soil Conservation

July 21, 2017 Riga, Latvia

Organized by



and by

# Latvijas Augsnes zinātnes biedrība Soil Science Society of Latvia



**Final Program** 

# Rationale

Soil classification has been largely used as a proxy for soil qualities. Knowledge of soil types is essential in planning soil conservation measures. Traditionally, this activity has been carried out by National and Regional Soil Services, at the detailed and semi-detailed scales, but also by International bodies, especially at the broad scales. However, the use of soil classification for the specific implementation of soil conservation measures at the local scale remains challenging. The development of the WRB Soil Classification System has progressively improved the characterization of the functioning of soil systems, thus improving our understanding of soil processes and soil functional qualities for both agriculture and the environment.

The Conference will bring together expertise and examples of the use of soil classification for the implementation of soil conservation measures and intervention plans at different scales and for different purposes. Interactions between experts in soil classification, soil conservation planning and soil mapping are encouraged.



#### HONORARY COMMITTEE

Pascal	BOIVIN	President of European Confederation of Soil Science Societies (ECSSS)	Switzerland	
Dace	KIRŠTEINA	Ministry of Environmental Protection and Regional Development, Republic of Latvia	Latvia	
Rattan	LAL	President of International Union of Soil Sciences (IUSS) USA		
Luca	MONTANARELLA	JRC Action Leader in SOIL Italy		
Ildefonso	PLA SENTIS	President of International Soil Conservation	Spain	
		Organization (ISCO)	Crain	
José Luis	RUBIO	Vice Chair of European Soil Bureau Network (ESBN)	Spain	
Li	RUI	President of World Association of Soil and Water	China	
		Conservation (WASWC)		
Peter	SCHAD	Chair of International Union of Soil Sciences (IUSS)	Germany	
		Working Group World Reference Base for Soil		
		Resources (WRB)		
Kristīne	SIRMĀ	Ministry of Agriculture, Republic of Latvia	Latvia	
Ronald	VARGAS	Secretary of the Global Soil Partnership - FAO	Italy	
			,	

#### INTERNATIONAL SCIENTIFIC COMMITTEE

Edoardo Carmelo	COSTANTINI DAZZI	The Agricultural Research Council (CREA) President of European Society for Soil Conservation (ESSC)	Italy Italy
Cezary	KABAŁA	Wroclaw University of Environmental and Life Sciences	Poland
Aldis	KĀRKLIŅŠ	Soil Science Society of Latvia, Latvia University of Agriculture	Latvia
Raimonds	KASPARINSKIS	President of Soil Science Society of Latvia, University of Latvia	Latvia
Māris	KĻAVIŅŠ	President of Latvia National Peat Society, University of Latvia	Latvia
Oļģerts	NIKODEMUS	Soil Science Society of Latvia, University of Latvia	Latvia
Endla	REINTAM	Estonian Society of Soil Science, Estonian University of Life Sciences	Estonia
Rimantas	VAISVALAVIČIUS	Vice-president of Lithuanian Soil Science Society, Aleksandras Stulginskis University	Lithuania

### LOCAL ORGANIZING COMMITTEE

Raimonds Kasparinskis (Chair of the conference), Vita Amatniece, Linda Dobkeviča, Laimdota Kalniņa, Aldis Kārkliņš, Māris Kļaviņš, Māris Krievāns, Imants Kukuļs, Oļģerts Nikodemus, Oskars Purmalis, Anda Ruskule, Juris Soms, Zane Vincēviča-Gaile

**Organizer's contact:** Raimonds Kasparinskis (e-mail: raimonds.kasparinskis@lu.lv)

# Homepage:

<u>http://www.azb.lu.lv/eng/</u> or <u>http://www.azb.lu.lv/home/international-workshop-soil-classification-a-powerful-tool-for-planning-soil-conservation/</u>

Venue:

The Academic Center for Natural Sciences of the University of Latvia, **Riga** (http://www.tornakalns.lv/eng/)



The Academic Center for Natural Sciences of the University of Latvia, Riga, the Venue of the workshop

### PROGRAM

08:30 - 10:00	Registration		
10:00 - 10:30	Welcome addresses		
	• Dean, University of Latvia, Faculty of Geography and Earth Sciences		
	prof. Zaiga Krišjāne		
	Ministry of Agriculture, Republic of Latvia		
	Kristīne Sirmā		
	President of European Society for Soil Conservation		
	prof. Carmelo Dazzi		
	President of Soil Science Society of Latvia		
	Assist. prof. Raimonds Kasparinskis		
	Plenary lectures		
	Chairperson: Aldis Kārkliņš		
10:30 - 11:00	WRB for characterizing risks to soils, degradation of soils and protection of soils.		
	Peter Schad		
11:00 - 11:30	Do soil classifications support the soil conservation? Current state in Central		
	European countries.		
	Cezary Cabala		
11:30 - 12:00	What's in a name: Can soil classification help understand/manage soil		
	conservation?		
	Carmelo Dazzi		
12:00 - 12:30	Soil diversity in Latvia according to genetic soil classification and WRB.		
	Raimonds Kasparinskis		
42.20 42.50			
12:30 - 12:50	Questions and discussion		
12:50 - 13:30	Lunch		
12.50 - 15.50			
	Oral communications		
	Chairperson: Carmelo Dazzi		
13:30 - 13:50	WRB and National soil classifications – peaceful coexistence.		
15.50 15.50	Aldis Kārkliņš		
13:50 - 14:10	Soil and agriculture for the future.		
10.00 11.10	Augusto Zanella		
14:10 - 14:30	Biological indicators of topsoil formation: A case study from forest sites in Estonia.		
	Ulfert Graefe, Raimo Kõlli, Gerhard Milbert, Gabriele Broll		
14:30 - 14:50	Identifying intact and weakly disturbed ecosystems as urban protected areas		
	basing on diagnostic of their soils.		
	Tatiana Prokofieva, Maria Gerasimova, Anna Buivolova, Anna Rakhleeva		
14:50 - 15:10	Irrigated desert soils in the Tarim basin, China. How can soil classification help to		
	detect problems and limits.		
	Karl Stahr, Hussein Othmanli		
15:10 - 15:25	Coffee break		

	Oral communications		
	Chairperson: Cezary Kabala		
15:25 - 15:45	Pedogenesis of saline soils in Vojvodina Province, Serbia.		
	Jovica Radica Vasin, Jordana manol Ninkov, Stanko Bratislav Milić, Snežana Petar		
	Jakšić, Milorad Sava Živanov, Dušana Dušan Banjac, Vladimiri Ivan Ćirić		
15:45 – 16:05	Threats and challanges for sustainable soil management in Sierra Gorda and		
	volcanic landscapes in Queretaro, Mexico.		
	Norma Eugenia Garcia Calderon		
16:05 - 16:25			
	eastern Tanzania: implications for soil conservation.		
	Stefan Dondeyne, Andrew Kabanza, Didas Kimaro, Elly Kafiriti, Wouter Achten,		
	Jozef Deckers, J. Poesen		
16:25 - 16:45	Classification of anthropic soils: a quest for the very heavily amended P soils.		
	Jaume Boixadera Llobet		
16:45 - 17:00	Coffee break		
	Poster session		
	Chairperson: Raimonds Kasparinskis		
17:00 - 18:40	The role of soil factor on development of oak (Quercus robur) undergrowth		
	within coniferous forests in boreo-nemoral zone.		
	Vita Amatniece, Oļģerts Nikodemus		
	Impact of forest land age on soil properties in glacial till upland in Vidzeme,		
	Latvia.		
	Elīna Bārdiņa Oļģerts Nikodemus		
	Characteristics of humic substances in different soil groups (WRB) of former		
	agricultural lands in Latvia.		
	Imants Kukuļs, Oļģerts Nikodemus, Raimonds Kasparinskis, Elīna Bārdiņa		
	The role of soil information in regional planning for resource conservation: some		
	examples.		
	Stephan Mantel		
	Diversity of grassland soils and soil properties in local scale in long-term		
	cultivated agricultural lands in Vidzeme upland, Latvia.		
	Maija Pavlovska		
	Link between soils and ecosystem services in grasslands within Vidzeme upland,		
	Latvia.		
	Ieva Rotkovska, Raimonds Kasparinskis		
	Impact of afforestation on the development of the podzolization process on		
	former agricultural lands.		
	Agnese Rudusāne, Nauris Rolavs, Raimonds Kasparinskis		
	Phytoreclamation Possibility of Restoration of Fertility Anthropogenous –		
	Degraded Deserted-Sandy Soil, Passed in Blown Sandy Barkhans.		
Bekzat Rsymbetov			
The soil window: A tool for your study.			
	Maria Desamparados Soriano Soto, Laura García-España Soriano, Vicente Pons		
	Martí, Eduardo Blasco Talaván		

	The problem of Retisol identification in the agrogenic landscape of Lithuanian moraine highlands. Jonas Volungevičius, Rimantas Vaisvalavičius, Kristina Amalevičiūtė-Volungė, Alvyra Šlepetienė
20:00	Dinner

# Sponsored by:

International Union of Soil Sciences	WASWAC	<b>ISCO</b> International Soil Conservation Organization
****   ****   European   Commission	ECSSS	GLOBAL SOIL PARTNERSHIP
International Decade of Soils 2015-2024	W. COO	

# Transport from airport "Riga" to Riga city center

Airport "Riga" is located approximately 10 km from Riga city center. There are 5 types of transport to and from the airport. Trip to the city center normally takes 20-30 min, but in rush hours (8:00-10:00 and 17:00-19:00) it could be more.

# 1) Taxi

You will find the taxis just outside the arrival terminal. There are 2 types of taxi there: "**Red Cab**" and the green "**Baltic Taxi**". (It can be recommend only to use these 2 in Riga as they are fair) The taxi trip to the city center normally takes 15-20 min., price is apx. EUR 12,00-13,00 depending on the traffic no matter how many (4) in the taxi. For groups up to 8 people mini vans available.

"Red Cab" Wheelchair accessible mini vans (must be pre-ordered).

"Red Cab" and "Baltic Taxi" accept credit cards.

Vouchers for the Baltic taxi can be bought at AirBaltic homepage: https://www.airbaltic.com/lv-LV/index

# 2) Private transfer

Some companies or hotels offer private transfers from Riga airport to the main resorts in Latvia. In that case a driver meets and greets you directly at the airport. It allows to avoid queuing for a taxi and pay a fixed price in advance (no surprise at the arrival). You can pre-book your transfer on their website.

3) Bus No. 22

Bus number 22 (Riga) takes you to the Old Town or to Airport (Lidosta). It is only during day time. The bus stop is also just outside the arrival terminal, but you need to cross the small parking space. It is the only bus leaving from airport.

There are 2 stops at the Old Town depending on which part you need to arrive in.

The first stop is just around the corner, when you have passed the bridge across the river Daugava. This stop leads you to the "beginning" of the Old Town with Latvia occupation museum, Kalku iela and Dome Square. The next stop is by Stockmann/Forum cinema and are close to the Bus station, Train station, Riga National Opera.

The bus trip takes normal 30 min.

Cards can be bought in Narversen Kiosks (one just outside airport), or in automat (takes credit cards) at airport bus stop and other larger bus stops.

# Important: Remember to validate ticket/card every time entering a new bus/tram.

- A ticket for an unlimited number of trips is valid 24 hours from its first usage costs 5.00EUR.
- A regular ticket for one trip can be bought from the bus driver 2.00 EUR, but if you buy it before commencing your trip at the airport services and tourism information bureau "Welcome to Riga", in a ticket vending machine at the stop of Bus 22 and in Narvesen press kiosks at Level 1 and 2 of the terminal. Regular one-way ticket will cost you only (1.15 EUR).
- You can also buy cards with 10 trips, or 1, 3 or 5 days.
- Additional information on bus lines and schedules at <u>www.rigassatiksme.lv</u>.
- Toll-free information: (+371) 8 000 19 19 (+371) 8 000 19 19.

Departure every 15 min. +/- depending of time at day. No night service. timetable here: <u>http://saraksti.rigassatiksme.lv/index.html</u>

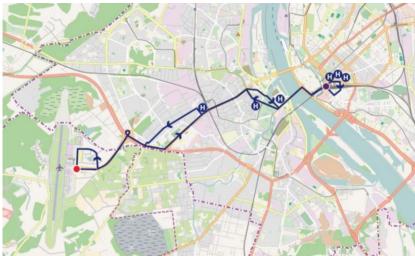
# 4) Riga Shuttle Bus

Minivan service that goes from Riga Airport to city center hotels. You name the hotel or place in Riga center and they go there with no stops. Departure time every 30 min. Trip duration - approx 30 min. One way fare - 5 € per persone, children under 6 years - free. No additional payment for luggage. The shuttle bus stop is located in front of E arrival exit.

# 5) Mini-Bus (Service only daytime)

For a fast and convenient trip from the airport to the city centre choose **minibus No. 222** with the route Riga Central Station – Airport by the minibus company "Rīgas mikroautobusu satiksme" which offers a higher comfort passenger transportation in Riga.

Going from the airport to the centre, the minibus departs from P1 Parking, whereas in the direction to the airport — from the Riga Central Station which is situated across Origo Shopping Centre, from Satekles Street.



Mini-Bus route 222

You can get from the airport to the city centre also with **minibus No. 241** with the route Centre – Airport which from the centre to the airport departs from Esplanāde bus stop. The minibuses depart every 10-15 minutes. The journey to the city centre will take around 30 minutes.



#### Mini-Bus Route 241

222 241 journey with minibuses No. and For the you can choose to pay: • with an e-ticket which can be purchased at the airport services and tourism information bureau "Welcome to Riga", Arrivals Sector E (price EUR 1,15) or at kiosks located in the terminal on the 1st and 2nd floor. a single-journey ticket can be purchased from the minibus driver — price EUR 2,00.

More information about the routes and schedules of the minibuses available here: <u>http://marsruti.lv/rigasmikroautobusi</u>.

Toll-free information line: +371 800 19 19