



RIO18
21st World Congress
of Soil Science

21 WORLD CONGRESS OF SOIL SCIENCE

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Rio de Janeiro, Brazil

Rio de Janeiro August | 12 - 17

E1 - SOILS FIELD TRIP IN THE WESTERN AMAZON REGION - RONDÔNIA STATE – INDIAN BLACK EARTH

Summary: The field trip will cover an itinerary of approximately 2,500 km of the Western region of Amazon, in the state of Rondônia. During the trip some of the main soils in the state will be seen, originated under different landscapes and soil forming processes. The trip will include about 12 profiles, and along the trip different land usages and ecosystems will also be presented. The last day we will visit a Indian black earth, who is found in patches of soil throughout the Amazon basin, whose origin is related to the deposition of waste materials from pre-Columbian populations

Period:

Pre-event; 1st to 8th August of 2018; 2,500 km in eight days.

Guides:

Profa. Lucia Helena Cunha dos Anjos (Pedologist of Soil Science Department, of Federal Rural University of Rio de Janeiro - UFRRJ);

Profa. Elaine Delarmelinda de Almeida (Pedologist/Mineralogist, of Federal University of Rondônia- UNIR);

Contact:

Elaine Delarmelinda: e-mail: elaineadell@gmail.com; Skype: elaine_ro; Phone/Whatsapp: +5569 9 9929 9395

Attention:

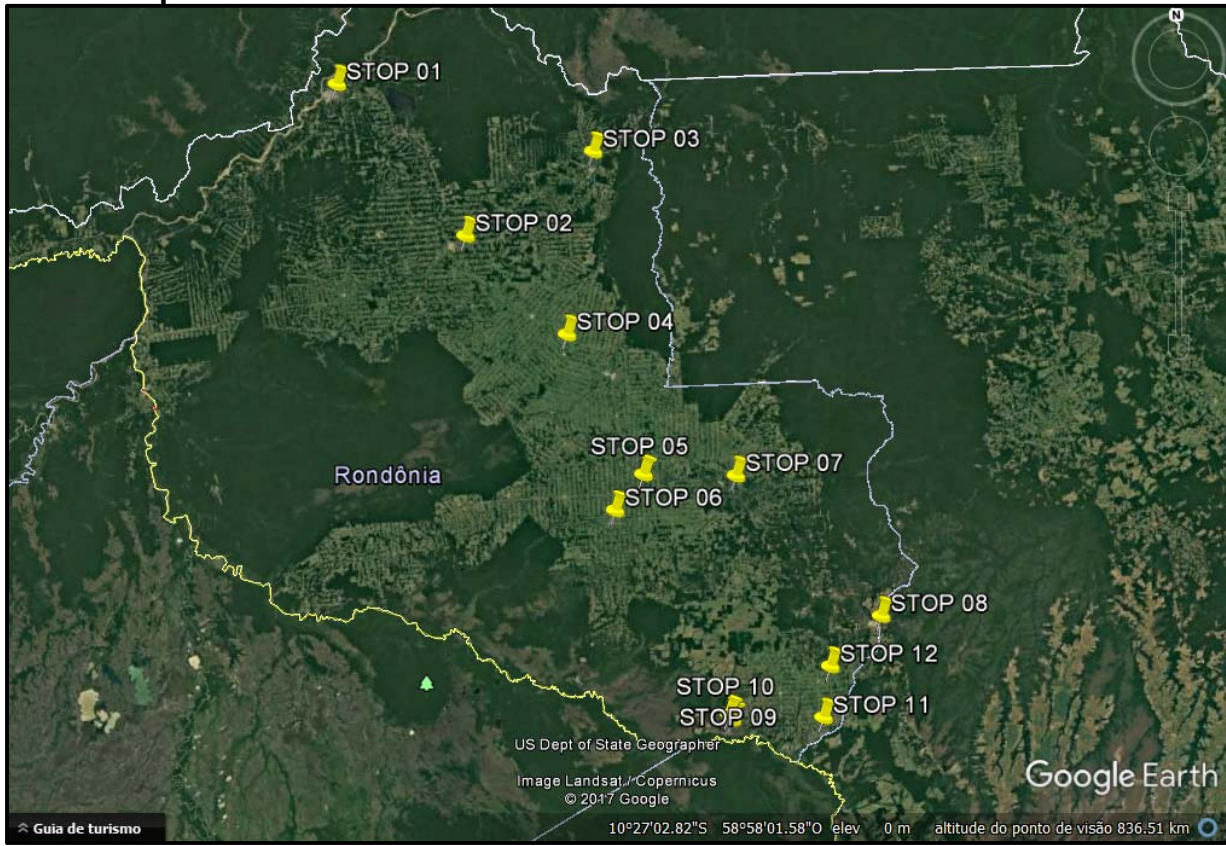
All participants are responsible for their travel to the meeting point at the beginning of the tour. The yellow fever vaccine is recommended for travel to this part of Brazil.

Itinerary:

Day/Month	Description
01/08 (Wednesday)	<i>Afternoon:</i> Arriving at hotel in Porto Velho (capital), oppening ceremony at the Embrapa Rondônia auditorium

02/08	<p><i>Morning:</i> Meeting at the hotel (7:30 am) in Porto Velho and a short trip to Experimental Research Area of Embrapa Rondônia - PLINTOSSOLO ARGILÚVICO (Plinthosol) (1º. Stop);</p> <p><i>Lunch:</i> at 11:00 in Porto Velho</p> <p><i>Afternoon:</i> Travel to Ariquemes; profile at the campus of Federal Institute of Rondônia, LATOSSOLO AMARELO (Ferralsol) (2º. Stop);</p> <p><i>Night:</i> Dinner and overnight stay at a hotel in Ariquemes</p>
03/08	<p><i>Morning:</i> Travel to Machadinho do Oeste; profile of LATOSSOLO AMARELO Ácrico (Ferralsol), at the Experimental Research Area of Embrapa Rondônia in Machadinho (3º. Stop);</p> <p><i>Lunch:</i> at 11:00 in Machadinho do Oeste</p> <p><i>Afternoon:</i> Travel to Ouro Preto do Oeste; profile of LATOSSOLO VERMELHO-AMARELO Eutrófico (Ferralsol) (4º. Stop).</p> <p><i>Night:</i> Dinner and overnight stay at a hotel in Ouro Preto do Oeste</p>
04/08	<p><i>Morning:</i> Travel to Rolim de Moura; profile of ARGISSOLO VERMELHO-AMARELO Distrófico (Regosol), at the campus of Federal University of Rondônia (5º. Stop);</p> <p><i>Lunch:</i> at 11:00 in Rolim de Moura</p> <p><i>Afternoon:</i> Travel to Alta Floresta do Oeste, profile of a NITOSSOLO VERMELHO Eutrófico (Nitisol) (6º. Stop).</p> <p><i>Night:</i> Dinner and overnight stay at a hotel in Rolim de Moura</p>
05/08	<p><i>Morning:</i> Travel to Pimenta Bueno; profile of CAMBISSOLO HÁPLICO Ta Eutrófico (Gleysol) in an area of Cerrado (7º. Stop);</p> <p><i>Lunch:</i> at 11:00 in Pimenta Bueno</p> <p><i>Afternoon:</i> Travel to Vilhena; profile of LATOSSOLO VERMELHO-AMARELO Ácrico (Ferralsol) at the Experimental Research Area of Embrapa Rondônia (8º. Stop).</p> <p><i>Night:</i> Dinner and overnight stay at a hotel in Vilhena</p>
06/08	<p><i>Morning:</i> Travel to Pimenteiras do Oeste; profile of PLINTOSSOLO HÁPLICO Ácrico (Ferralsol / Plinthosol) (9º. Stop);</p> <p><i>Lunch:</i> at 11:00 at the Rical Farm</p> <p><i>Afternoon:</i> Profile of LATOSSOLO AMARELO Distrófico (Ferralsol), in an area of Cerrado (grass). Return to Vilhena. (10º. Stop).</p> <p><i>Night:</i> Dinner and overnight stay at a hotel in Vilhena</p>
07/08	<p><i>Morning:</i> Travel to Colorado do Oeste; profile of PLANOSSOLO HÁPLICO Distrófico (Stagnosol) at the at the Experimental Area of Federal Institute of Rondônia. (11º. Stop);</p> <p><i>Lunch:</i> at 12:00 in Colorado do Oeste</p> <p><i>Afternoon:</i> Travel to Cabixi; profile of Amazonian Dark Earth (Pretic Ferralsol) (12º. Stop). Return to Vilhena</p> <p><i>Night:</i> Dinner and overnight stay at a hotel in Vilhena.</p>
08/08 (Wednesday)	<p><i>Morning:</i> Closing ceremony and return to Porto Velho</p> <p><i>Lunch:</i> at 12:30 in Pimenta Bueno</p> <p><i>Afternoon:</i> Return to Porto Velho</p> <p><i>Night:</i> Dinner and overnight stay at a hotel in <i>Porto Velho</i></p>

Travel map:



Cost per person: \$ 1,700 USD

Tour includes: Bus transportation, hotel (8 nights), breakfast (at the hotel), lunch, dinner and beverage along the trip (bottled water), technical guides and staff to assist in the logistics (organization of the trip and emergency support along the route).

Group: 25-40 people. In case we don't reach the minimum number of participants the excursion will not be held and the values paid will be reimbursed.

Accommodations:

Day	Hotels*
01	Hotel in Porto Velho (Slavieiro)
02	Hotel in Ariquemes (Valerius)
03	Hotel in Ouro Preto do Oeste (Graunas)
04	Hotel in Rolim de Moura (Ecos)
05	Hotel in Vilhena (Vison)
06	Hotel in Vilhena (Vison)
07	Hotel in Vilhena (Vison)
08	Hotel in Porto Velho (Slavieiro)

* In some hotels double rooms may be required; if a single room only is requested the participant will have to pay additional costs.

Places to be visited - Landscape and usage

Experimental Research Area of Embrapa Rondônia, in Porto Velho (**1º. Stop**)



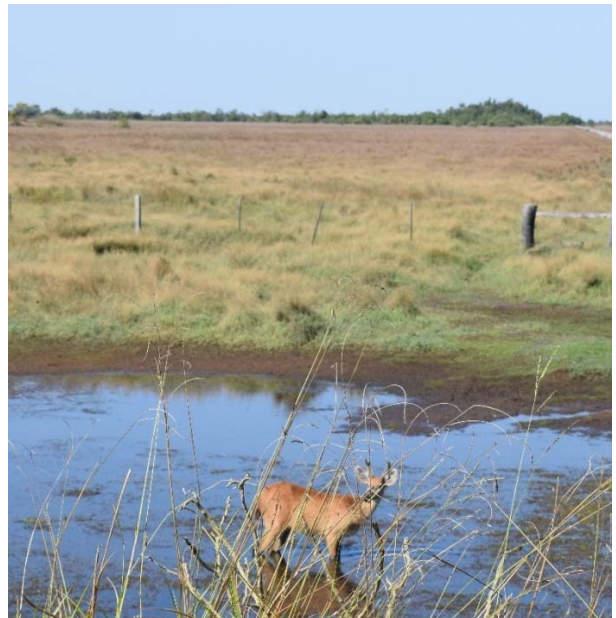
Exp. Research Area of Federal Institute of Rondônia in Ariquemes (**2º. Stop**)



Experimental Research Area of Embrapa in Machadinho do Oeste (**3º. Stop**)



Rical Farm in Pimenteiras do Oeste (**9º. Stop**)



Experimental Research Area of Federal Institute in Colorado do Oeste (**11° Stop**)



Soils to be examined



STOP 01

PROFILE RO 01

DATE – 11/07/2016

CLASSIFICATION* – PLINTOSSOLO ARGILÚVICO Distrófico típico; Katostagnic Plinthosol.

LOCATION – Experimental Research Area of Embrapa Rondônia, Porto Velho, Rondônia. Coordinates: 08° 47' 46,3" S and 63° 50' 46,5" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Terrace, 0-1% slope; pasture.

ALTITUDE – 80 m

*Brazilian Soil Classification System - SiBCS, and WRB



STOP 02

PROFILE RO 12

DATE – 15/09/2016

CLASSIFICAÇÃO – LATOSSOLO AMARELO Distrófico típico (sombrio?); Xanthic Ferralsol

LOCATION – IFRO Ariquemes, Ariquemes, Rondônia. Coordinates: 09° 57' 10,0" S and 62° 56' 51,4" WGr. (datum WGS 84).

SLOPE AND SOIL COVERAGE – Upper third of slope, slowly undulating relief with 3-5% slope; grass coverage.

ALTITUDE – 134 m



STOP 03

PROFILE RO-09

DATE – 20/07/2016

CLASSIFICATION – LATOSSOLO AMARELO Ácrico típico; Geric Xanthic Ferralsol.

LOCATION – Experimental Research Area of Embrapa Rondônia, Machadinho do Oeste, Rondônia. Coordinates: 09° 23' 59,3" S and 62° 00' 58,9" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – High plain, 0 to 1% slope, equatorial forest.

ALTITUDE – 149 m



STOP 04

PROFILE RO-02

DATE – 13/07/2016

CLASSIFICATION – LATOSSOLO VERMELHO-AMARELO Eutrófico argissólico; Katolixic Ferralsol

LOCATION – Highway BR 364, approximately 2.0 km from Ouro Preto do Oeste (RO). Coordinates: 10° 41' 20,2" S and 62° 16' 22,3" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Middle slope, with 6-10%, undulating relief; pasture.

ALTITUDE – 265 m



STOP 05

PROFILE RO -04

DATE – 14/07/2016

CLASSIFICATION – ARGISSOLO VERMELHO-AMARELO Distrófico abrupto saprolítico petroplíntico (gleissólico, cambissólico); Endodystric Epieutric Endoskeletal Regosol

LOCATION – Rolim de Moura, campus of Federal University of Rondônia (UNIR). Coordinates: 11° 42' 16,6" S and 61° 46' 31,0" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Lower part of slope with 2 to 4%, fruit trees and grasses.

ALTITUDE – 235 m



STOP 06

PROFILE RO --03

DATE – 14/07/2016

CLASSIFICATION – NITOSSOLO VERMELHO Eutrófico típico; Hypereutric Katolixic Katosideralic Nitisol.

LOCATION – State Road RO-135, approximately 1.5 km from Alta Floresta do Oeste commercial center. Coordinates: 11° 56' 53,3" S and 61° 59' 34,6" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Middle to upper slope, 6 to 10%; grasses.

ALTITUDE – 377 m



STOP 07

PROFILE RO 13

DATE – 17/09/2015

CLASSIFICATION – CAMBISSOLO HÁPLICO Ta Eutrófico saprolítico vertissólico epirredóxico; Hypereutric Katostagnic Gleysol.

LOCATION – Highway BR-364, at 19.8 km from intersection to Rolim de Moura, toward Vilhena, Pimenta Bueno, Rondônia. Coordinates: 11° 47' 56,5" S and 61° 03' 11,6" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Upper plain (interfluves), 1-2% slope; Equatorial Cerrado with shrubs and low trees.

ALTITUDE – 239 m



STOP 08

PROFILE RO 05

DATE – 15/07/2016

CLASSIFICATION – LATOSSOLO VERMELHO-AMARELO Ácrico típico; Geric Ferralsol.

LOCATION – Experimental Research Area of Embrapa Rondônia, approximately 10 km from Vilhena, Rondônia. Coordinates: 12° 47' 27,3" S and 60° 06' 2,6" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Upper plain, 0 to 1% slope; grasses, originally equatorial Cerrado with trees.

ALTITUDE – 613 m



STOP 09

PROFILE RO-15

DATE – 20/09/2016

CLASSIFICATION – PLINTOSSOLO HÁPLICO Ácrico gleissólico húmico; Geric Umbric Ferralsol (or Plinthosol).

LOCATION – Line 6, approximately 19 km from Pimenteiras do Oeste. RICAL Farm, Pimenteiras do Oeste, Rondônia. Coordinates: 13° 24' 36,8" S and 61° 13' 15,0" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Fluvial plain of Guaporé river (DANTAS e ADAMY, 2010), 0-1% slope; natural grasses equatorial field.

ALTITUDE – 173 m



STOP 10

PROFILE RO 14

DATE – 19/09/2016

CLASSIFICATION – LATOSSOLO AMARELO Distrófico plintossólico (petroplíntico?); Umbric Xanthic Ferralsol

LOCATION – Approximately 18.5 km from Pimenteiras do Oeste, RICAL Farm, Pimenteiras do Oeste, Rondônia. Coordinates: 13° 28' 26,0" S and 61° 10' 30,9" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Terrace of Guaporé River, 0-1% slope; pasture and previously under equatorial Cerrado grasses and shrubs with "murundus".

ALTITUDE – 179 m



STOP 11

PROFILE RO -07

DATE – 18/07/2016

CLASSIFICATION – PLANOSSOLO HÁPLICO Distrófico gleissólico; Endodystric Epieutric Endoacric Amphialbic Stagnosol

LOCATION – IFRO of Colorado do Oeste, Colorado do Oeste, Rondônia. Coordinates: 13° 07' 56,5" S and 60° 29' 08,0" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Terrace with 1 to 3% slope; pasture.

ALTITUDE – 390 m



STOP 12 - INDIAN BLACK EARTH

PROFILE RO -08

DATE – 19/07/2016

CLASSIFICATION – LATOSSOLO VERMELHO Eutrófico petroplíntico antrópico; Lixic Pretic Rhodic Ferralsol

LOCATION – Line 12, approximately 1.0 km from Cabixi, Rondônia. Coordinates: 13° 30' 0,9" S and 60° 33' 42,1" WGr (datum WGS 84).

SLOPE AND SOIL COVERAGE – Middle slope, 2 to 3%; pasture.

ALTITUDE – 216 m