

# 21 WORLD CONGRESS OF SOIL SCIENCE

21st World Congress of Soil Science Rio de Janeiro, Brazil

Rio de Janeiro August | 12 - 17

# E8 - FIELD TRIP TO LANDSCAPE AND SOILS IN MOUNTAIN AND COASTAL REGIONS OF RIO DE JANEIRO STATE

## **Summary:**

The field trip will cover landscapes and soils from the mountain to coastal regions of the Rio de Janeiro State. It has the purpose of showing the main soils, the geomorphology, vegetation and the different land usages. The human contribution to soil formation or modification will be observed in a Sambaqui (archaeological site, related to fishermen and gatherers of the Tupinambá ceramic ancestral groups).

#### Period:

Post event; 18 to 21th August, 2018. Departure from the Windsor Conventions & Expo Center at 7:30 am; approximately 500 km in four days.

#### Guides:

Drs. Ademir Fontana and Wenceslau Geraldes Teixeira (Researchers – Brazilian Agriculture Corporation – Soil Center - EMBRAPA).

#### Contact:

Drs. Ademir Fontana: e-mail: ademir.fontana@embrapa.br; Wenceslau Geraldes Teixeira: e-mail: wenceslau.teixeira@embrapa.br.

#### Attention:

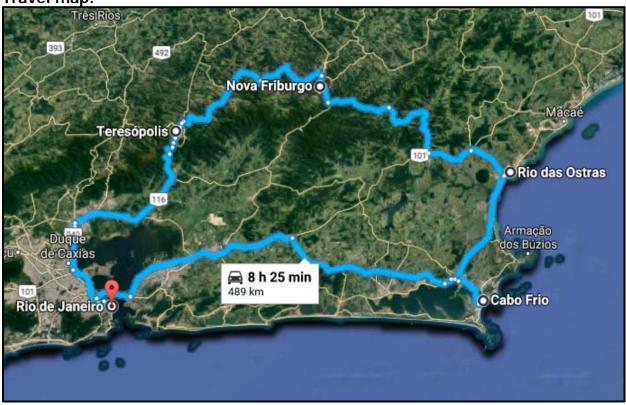
All participants are responsible for their travel to the meeting point at the beginning of the tour in Rio de Janeiro city. Comfortable clothes and hiking footwear, sun protection (hats or caps, UV protection lotion), and a personal backpack are recommended.

### Itinerary:

Day/Month	Description
18/08	Morning: Departure from the Windsor Conventions & Expo Center at 7:30 am toward Teresópolis city (1°. Stop); Lunch: at 13:00 hours in Teresópolis (100 km); Afternoon: visit soil and production area in Nova Friburgo city (2°. Stop); Night: Dinner and overnight stay in Nova Friburgo city.
19/08	Morning: Breakfast at 6:00 am and departure from the hotel at 7:00 am toward Rio das Ostras city (3°. Stop);  Lunch: at 12:00 hours in Rio das Ostras city (100 km);  Afternoon: Soils in Rio das Ostras city (4°. Stop);

	Night: Dinner and overnight stay in Cabo Frio City (60km).
20/08	Morning: Breakfast at 6:00 am and departure to visit soils in Araruama (65km) (5°. Stop);  Lunch: at 12:30 hours in Cabo Frio city  Afternoon: free time (beaches and coastal formations in Arraial do Cabo);  Night: Dinner and overnight stay in Cabo Frio
21/08	Morning: Breakfast at 6:00 am, departure to Rio Bonito with soil observation along the way (6°. Stop); Lunch: at 13:00 hours in Rio Bonito city Afternoon: Return to Rio de Janeiro city

Travel map:



Cost per person: around \$ 550 USD.

**Tour includes**: Bus transportation, hotel (3 nights), bottled water; technical guide and staff to assist in the logistics (organization of the trip).

**Group**: 30-35 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.

## Accommodation:

Day	Local
18/08	Nova Friburgo
19 and 20/08	Cabo Frio

## Places to be visited - scenic points

Dedo de Deus (an unique geological formation with a privileged view of Guanabara bay)



Praia do Forte (gorgeous beach with fine sands)



Beach and geological formation



## Landscape and site description:

1º Stop Valleys: Sandy and peat soils. Local relief - flat to slowly undulating. Quaternary sediments











Mountain range: Deep weathered soils, with humic horizons (relic). Mountainous relief. Intense horticulture

2º Stop

production.





## 3° Stop

## Sambaqui:

Soils modified by human actions (addition of shells, bones, charcoal etc)
Fluvial-marine environment





## 4° Stop

## **Coastal Tableland:**

Deeply weathered soils, kaolinitic and low iron clays.
Clayey sediments from Tertiary period;
Flat to slightly undulated relief.





## 5° Stop

## **Coastal Plains:**

Sandy soils and Spodosols Marine sand rich sediments from Quaternary.





## 6° Stop

# "Sea of hills" landscape:

Clay enriched soils, deeply weathered; Formed from Pre-Cambrian acid igneous rocks and the sediments derived; Undulating hills called "half oranges".