



**RIO18**  
21st World Congress  
of Soil Science

**21 WORLD CONGRESS OF SOIL SCIENCE**

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## **FIELD TRIP TO PRODUCTION SYSTEMS AND THE INTERACTION WITH SOIL AND ENVIRONMENT IN PARANÁ STATE**

**Summary:** The 5-day tour will take place in the State of Paraná, departing from Curitiba and ending in Foz do Iguaçu. It will cover technical and touristic aspects. In the technical part it is foreseen the observation and discussion of agricultural production systems and their interaction with the soils. To diversify and enhance the technical discussion, different systems will be involved, such as integration crop-livestock-forest, highly intensive agricultural systems, and family farming systems; all closely associated to the land use potential. As for the touristic attractions, two beautiful and international renowned parks will be visited: the Vila Velha State Park, and the Foz do Iguaçu Falls National Park.

### **Period:**

Post event; 19 to 23st of August, 2018; 725 km in four five days.

### **Guides:**

Drs. Gustavo Ribas Curcio and Annete Bonnet (Researchers – Brazilian Agriculture Cooperation – Forest Center – EMBRAPA)

### **Contact:**

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### **Attention:**

All participants are responsible for their travel to the beginning point that will be in Curitiba city, Paraná State. Also, at the end of the trip, to set your travel from Foz do Iguaçu city to your final destination. For the trip, comfortable clothes and footwear, sun protection (hats or caps, UV protection lotion), and a personal backpack are recommended. At the Iguaçu Falls, to carry a light rain coat is advisable.

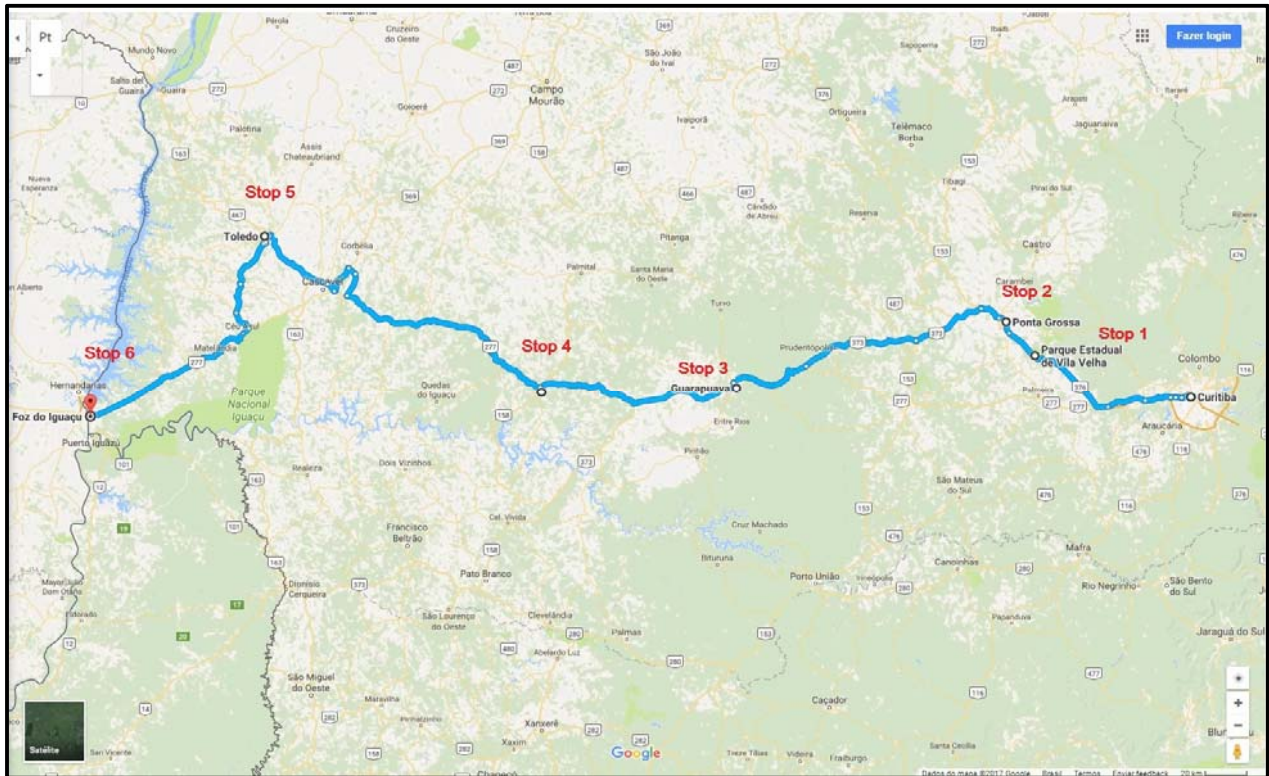
### **Itinerary:**

Day/Month	Description
18/08 Saturday	<i>All day.</i> Arriving at Curitiba international Airport (Afonso Pena) and transfer to the hotel Slaviero Executive Batel.



	<p><i>Afternoon:</i> Meeting at the hotel (18:00 hours) to review the field trip schedule;</p> <p><i>Dinner:</i> To be defined later or free choice;</p>
19/08 Sunday	<p><i>Morning:</i> Breakfast at 6:00 am, with departure from the hotel in Curitiba at 7:00 am toward Vila Velha State Park (<b>1° Stop</b>);</p> <p><i>Lunch:</i> at 12:00 hours in Ponta Grossa city (114 km)</p> <p><i>Afternoon:</i> Visit the Agronomic Institute to see experiments of integrated crop-livestock-forest system (<b>2° Stop</b>);</p> <p><i>Night:</i> Dinner and overnight stay in Ponta Grossa city (Hotel Bourbon in Ponta Grossa)</p>
20/08 Monday	<p><i>Morning:</i> Breakfast at 6:00 am, and departure to Guarapuava city (165km); visit Agrarian Cooperatives and agricultural production systems (technical discussion involving agricultural crops, soils and management) (<b>3° Stop</b>);</p> <p><i>Lunch:</i> at 12:30 pm in Guarapuava City</p> <p><i>Afternoon:</i> Technical visit to farms with different production systems, agricultural crops, soils and managements;</p> <p><i>Night:</i> Back to Guarapuava city, overnight stay at the Grande Hotel Guarapuava and dinner</p>
21/08 Tuesday	<p><i>Morning:</i> Breakfast at 6:00 am, and departure to Laranjeiras do Sul (65km); visit rural properties and family farming production systems (technical discussion involving local cultures, soils and management) (<b>4° Stop</b>);</p> <p><i>Lunch:</i> at 12:30 pm, in Laranjeiras do Sul city</p> <p><i>Afternoon:</i> Visit rural properties and family farming production systems (technical discussion involving local cultures, soils and management); departure to Cascavel city (165km);</p> <p><i>Night:</i> Dinner and overnight stay at Hotel Deville in Cascavel city</p>
22/08 Wednesday	<p><i>Morning:</i> Breakfast at 06:30 am, and departure to Toledo city (40km); visit a research unit in Toledo to observe erosion experimental plots (technical discussion involving soil erosion, crop rotation and management, and influence on recharge and hydrological discharge) (<b>5° Stop</b>);</p> <p><i>Lunch:</i> at 12:30 pm in Toledo city</p> <p><i>Afternoon:</i> Visit to ITAIPU binacional (the world's second largest hydroelectric facility), discussion of their soil research program to avoid silting in the reservoirs (technical discussion involving protection of water resources and forest species)</p> <p><i>Night:</i> Dinner and overnight at Hotel Vialle Tower</p>
23/08 Thursday	<p><i>Morning:</i> Breakfast at 7:00 am, leaving to visit the Iguaçu Falls National Park (80km); attractions the falls, animals and the Atlantic Forest (<b>6° Stop</b>);</p> <p><i>Lunch:</i> at 13:00 hours;</p> <p><i>Afternoon:</i> Free time and return</p>

## Travel map:



**Cost per person:** around \$ 850 USD (not defined yet)

**Tour includes:** Bus transportation, hotel (5 nights), breakfast (at the hotel), lunch, dinner, and beverage along the trip (bottled water); plus technical guide and staff to assist in the logistics (organization of the trip).

**Group:** 25-30 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	Hotels
18	Hotel Slaveiro Executive Batel – Curitiba; Phone: +5541 3017-1040 <a href="http://www.slavierohoteis.com.br/hotel-em-curitiba/slaviero-executive-curitiba-batel/hotel/">http://www.slavierohoteis.com.br/hotel-em-curitiba/slaviero-executive-curitiba-batel/hotel/</a>
19	Hotel Bourbon Ponta Grossa; Phone: +5542 3220-5200 <a href="https://www.bourbon.com.br/hotel/upscale-pt/convention-hotel-pt/bourbon-ponta-grossa/">https://www.bourbon.com.br/hotel/upscale-pt/convention-hotel-pt/bourbon-ponta-grossa/</a>
20	Grande Hotel Guarapuava; Phone: +5542 3623-2311 <a href="http://grandehotelguarapuava.com.br/portugues/">http://grandehotelguarapuava.com.br/portugues/</a>
21	Deville Express Cascavel; Phone: +5545 3227-3030 <a href="https://www.deville.com.br/hotel/deville-express-cascavel/">https://www.deville.com.br/hotel/deville-express-cascavel/</a>
22	Viale Tower - Foz do Iguaçu; Phone: +5545 3027-9900 <a href="http://www.vialehoteis.com.br/hoteis/viale-tower-hotel">http://www.vialehoteis.com.br/hoteis/viale-tower-hotel</a>

## Touristic places to be visited

Vila Velha State Park (geological interest site with sandstone formations) (**1º. Stop**)



Iguaçu Falls – Iguazú National Park (a set of about 275 waterfalls on the Iguazu River, surrounded by sub-tropical forest) (**6º. Stop**)



## Landscape/Site description:



### 1°. Stop

**City:** along the way between Curitiba and Ponta Grossa

**Distance from Curitiba:** 80 km

**Local:** Vila Velha State Park

**Description:** the tour inside the park will allow to seeing sandstone rock formations of rare beauty, permeated by vegetation with forests and savannas, forming a unique scenic landscape.



### 2°. Stop

**City:** Ponta Grossa

**Distance from 1°. Stop:** 35 km

**Institution:** IAPAR - Agronomic Institute of Paraná.

**Description:** technical discussion about the Integration System of Crop-Livestock-Forest, the production components, land usage potential and its characteristics.



### 3°. Stop

**City:** Guarapuava

**Distance from 2°. Stop:** 140 km

**Institution:** Agrarian Cooperative;

**Description:** visit crop fields of the Agrarian Cooperative - technical discussion involving crop rotation, and fertilization management according to soil type.



### 3°. Stop

**City:** Guarapuava

**Distance from 2°. Stop:** 140 km

**Institution:** Agrarian Cooperative;

**Description:** visit to farmers associated to the Agrarian Cooperative - technical discussion involving soil management, land use potential and their characteristics.



#### 4°. Stop

**City:** Laranjeiras do Sul

**Distance from 3°. Stop:** 65km

**Description:** visit to family agriculture farms - discussion on farming systems and their relationship within the landscape, with emphasis on soil and water (in the morning), and on pluralization of production according to soil type and its benefits (afternoon)

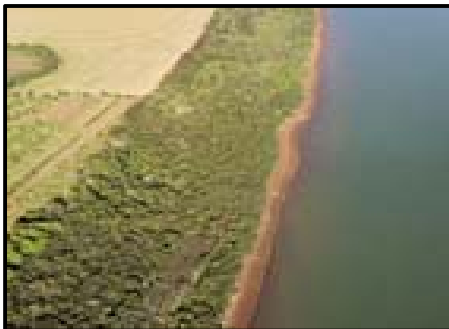


#### 5°. Stop

**City:** Toledo (morning)

**Distance from 4°. Stop:** 135km

**Description:** visit to experimental erosion plots - discussion involving soil erosion, compaction, crop rotation, management and soil characteristics.

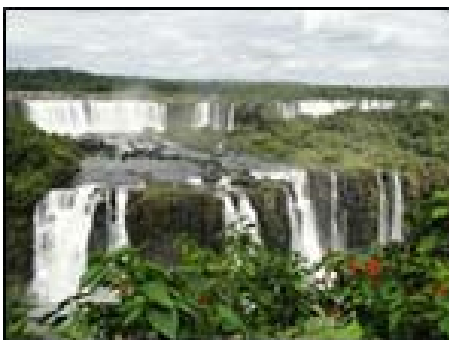


#### 5°. Stop

**City:** Toledo (afternoon)

**Distance from 4°. Stop:** 135 km

**Description:** visit to ITAIPU Lake - technical discussion with emphasis on importance of ciliary forests, tree species, and their adaptability to the hydromorphic soil conditions.



#### 6°. Stop

**City:** Foz do Iguaçu

**Distance from 5°. Stop:** 150 km

**Description:** a tour to the Iguassu Falls, one of the most beautiful group of waterfalls in the world, as well as the largest remnant forest (semi-deciduous) in the Southern region of Brazil.