Post-Congress Tour 5: Northeast Thick Black Soil Region Scientific expedition

June 12-16, 2026

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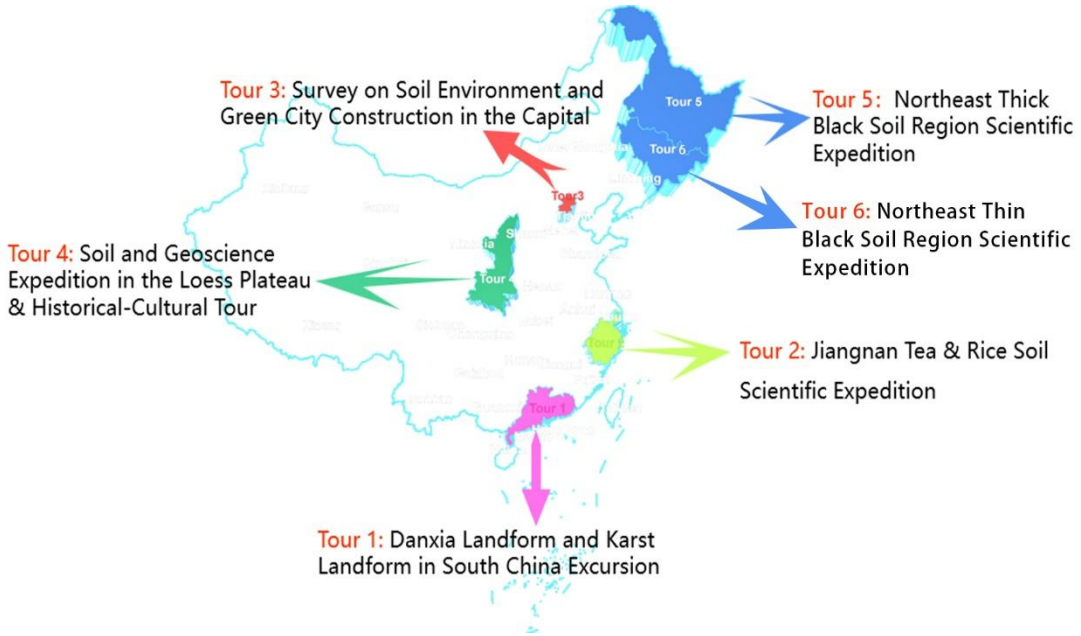
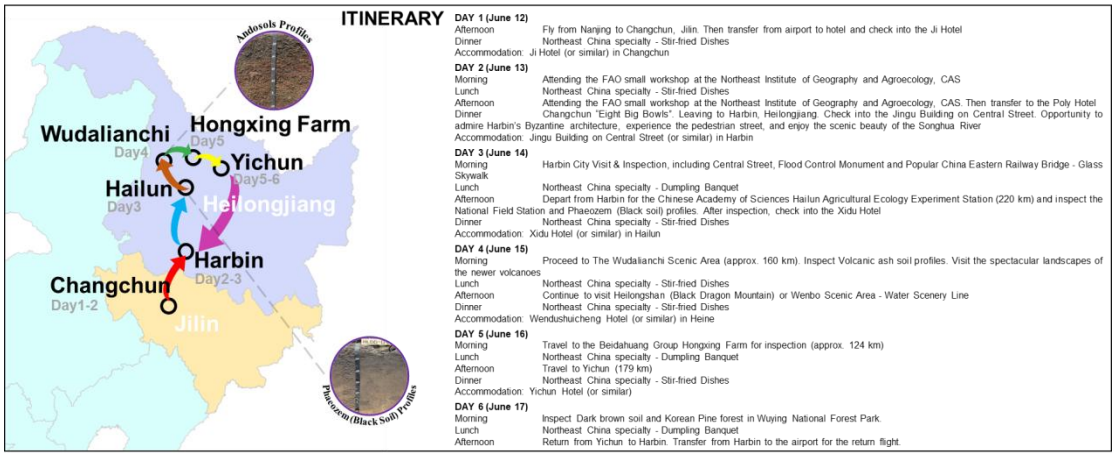
PROGRAM:

Tour 5: Northeast Thick Black Soil Region Scientific expedition

This 5-day scientific expedition explores through Northeast China’s unique black soil region, focusing on the examination of key soil profiles including Chernozem (Black soil), Volcanic ash soil, Dark brown soil, Meadow soil, and Albie soil. Additionally, it includes visits to typical cultural sites such as Central Street and Popular China Eastern Railway Bridge.





Price: $880 or ¥6300 per person.

The quoted price includes:

Entrance Fees: To all scheduled attractions.

Meals: 4 breakfasts, 4 lunches and 4 dinners, and complimentary bottled water.

Accommodation: Provide a double room per person at a local 4- to 5-star standard hotels.

Transport: Flight (economy class) from Nanjing to Harbin, with air-conditioned coach throughout.

Insurance: Personal travel accident insurance.

DAY 1 (June 12)

Afternoon Fly from Nanjing to Changchun, Jilin. Then transfer from airport to hotel and check into the Ji Hotel

Dinner Northeast China specialty - Stir-fried Dishes

Accommodation: Ji Hotel (or similar) in Changchun

DAY 2 (June 13)

Morning Attending the FAO small workshop at the Northeast Institute of Geography and Agroecology, CAS

Lunch Northeast China specialty - Stir-fried Dishes

Afternoon Attending the FAO small workshop at the Northeast Institute of Geography and Agroecology, CAS. Then transfer to the Poly Hotel

Dinner Changchun “Eight Big Bowls”. Leaving to Harbin, Heilongjiang.

Check into the Jingu Building on Central Street. Opportunity to admire Harbin's Byzantine architecture, experience the pedestrian street, and enjoy the scenic beauty of the Songhua River

Accommodation: Jingu Building on Central Street (or similar) in Harbin

DAY 3 (June 14)

Morning Harbin City Visit & Inspection, including Central Street, Flood Control Monument and Popular China Eastern Railway Bridge - Glass Skywalk

Lunch Northeast China specialty - Dumpling Banquet

Afternoon Depart from Harbin for the Chinese Academy of Sciences Hailun Agricultural Ecology Experiment Station (220 km) and inspect the National Field Station and Phaeozem (Black soil) profiles. After inspection, check into the Xidu Hotel

Dinner Northeast China specialty - Stir-fried Dishes

Accommodation: Xidu Hotel (or similar) in Hailun

DAY 4 (June 15)

Morning Proceed to The Wudalianchi Scenic Area (approx. 160 km). Inspect Volcanic ash soil profiles. Visit the spectacular landscapes of the newer volcanoes

Lunch Northeast China specialty - Stir-fried Dishes

Afternoon Continue to visit Heilongshan (Black Dragon Mountain) or Wenbo Scenic Area - Water Scenery Line

Dinner Northeast China specialty - Stir-fried Dishes

Accommodation: Wendushuicheng Hotel (or similar) in Heine

DAY 5 (June 16)

Morning Travel to the Beidahuang Group Hongxing Farm for inspection

(approx. 124 km)

Lunch Northeast China specialty - Dumpling Banquet

Afternoon Travel to Yichun (179 km)

Dinner Northeast China specialty - Stir-fried Dishes

Accommodation: Yichun Hotel (or similar)

DAY 6 (June 17)

Morning Inspect Dark brown soil and Korean Pine forest in Wuying National Forest Park.

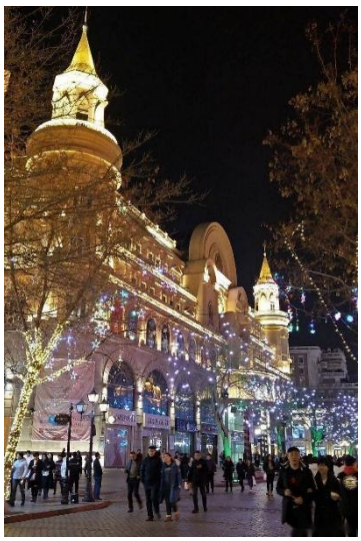
Lunch Northeast China specialty - Dumpling Banquet

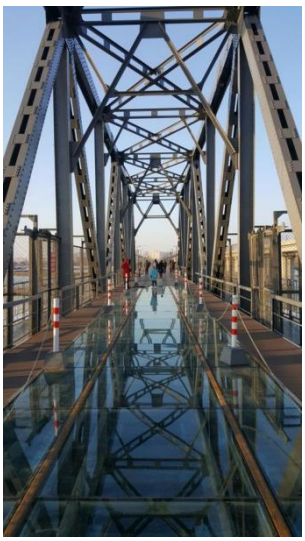
Afternoon Return from Yichun to Harbin. Transfer from Harbin to the airport for the return flight.

SITE 1: Harbin, Heilongjiang

BACKGROUND:

- Central Street: Stroll along Central Street, featuring 71 buildings of various European architectural styles and the longest commercial pedestrian street in Asia. Experience walking on the solid, exquisite, smooth, and fine stone pavement, immerse yourself in an architectural art gallery, and feel the infinite charm of this century-old street full of exotic flair.
- Flood Control Monument: A symbol of the Harbin people’s victory over the raging floods.
- Popular China Eastern Railway Bridge - Glass Skywalk: Located on the east side of Stalin Park along the Songhua River, the Binzhou Bridge glass skywalk combines thrills and scenery. It is not only one of the earlier railway bridges over the Songhua River but also a famous cross-river bridge in Harbin, and the city’s oldest existing structure spanning three centuries. Although trains no longer thunder across it, the bridge's silhouette is particularly enchanting under the sunset.





SITE 2: Chinese Academy of Sciences Hailun Agricultural Ecology Experiment Station, Hailun

BACKGROUND:

- This research station focuses on the black soil region of Northeast China, conducting studies on agroecosystem monitoring, degradation restoration, and sustainable development.
- It maintains a 21-hectare experimental field, two 10,000-mu (approximately 667-hectare) demonstration zones, and 11 long-term monitoring and observation sites, while preserving nearly 6,000 black soil samples.
- Through over 30 years of fixed-site experiments, the developed “Longjiang Model” has been promoted across 47.3 million mu (about 3.15 million hectares) of farmland. Additionally, the cultivated “Dongsheng” series of soybean varieties have been extended to 50 million mu (around 3.33 million hectares), increasing yields by 1 million metric tons).

PROFILE DESCRIPTION：

Pit 1: Phaeozem (Black Soil) Profiles

Theme: Anthropogenic influence on Phaeozem (Black Soil) development

Genetic explanation of soil profile morphology:

Phaeozem: Phaeozem develop in a temperate semi-humid climate, characterized by

warm, rainy summers and severely cold winters with little snow. The mean annual temperature ranges from -0.5 ℃ to 5 ℃, with a seasonal frozen layer reaching depths of 1.5-2.0 m, and up to 3 m in northern regions. The accumulated temperature (≥ 10 ℃) is between 2100 ℃ and 2700 ℃. Annual precipitation ranges from 450 to 600 mm, with an aridity index of 0.75-0.90. The parent material primarily consists of Quaternary diluvial loess-like clay, with thicknesses up to 10-40 m and no calcium carbonate content. The groundwater table is deep, at about 10-30 m, with a mineralization degree of 0.3-0.7 g/L. Due to the relatively heavy and clayey soil texture, meltwater and rainwater during the wet season struggle to infiltrate downward, leading to the formation of a perched water table in the upper soil layer. The soil moisture regime is classified as a semi-frozen periodic leaching type. The profile exhibited a typical Ap-Ah-AB-BC horizon sequence. Located in Hailun, Heilongjiang.

Position: 126°38′E, 47°26′N

Morphological descriptions

Horizon	Depth (cm)
Ap	0~35
Ah	36~62
AB	62~86
BC	86~113
C	113~158

SITE 3: Heilongshan (Black Dragon Mountain) or Wenbo Scenic Area - Water Scenery Line, The Wudalianchi Scenic Area

BACKGROUND:

- Heilongshan is the youngest volcano, formed after eruptions in 1719 and 1720.
- Heilongshan and the adjacent Huoshaoshan (Burning Hill) were born from smoke and fire, leaving behind remarkably clear and comprehensive volcanic landforms, such as the mountain summit crater, sea of lava rocks, Water Curtain Cave, lava vent, secondary crater, “Kaitian Li”, “Laojun Pine”, lightning strike sites, etc.
- Huoshaoshan erupted during the same period as Heilongshan. The entire volcanic cone is composed of accumulated black, brown, and purple pumice and basalt.
- Wenbo was formed by water accumulation after lava collapse on the lava plateau. It includes three lakes: Jingbo, Bibo, and Libo, with a total length of 1200m. Wenbo is a pearl on the volcanic lava flow and is located in the high-magnetic core area of the Wudalianchi Geological Park.

PROFILE DESCRIPTION：

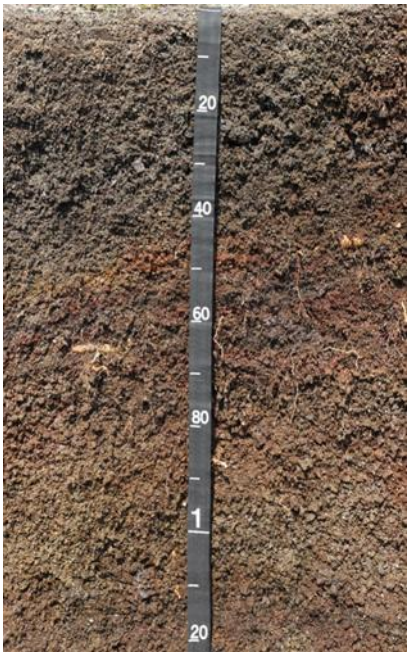
Pit 2: Andosols Profiles

Theme: The initial development of soils

Genetic explanation of soil profile morphology:

Andosols: Andosols, or volcanic ash soils, undergo a rapid and distinctive formation process driven by the unique interaction between fresh volcanic ejecta and organic matter under humid climates. The journey begins with the deposition of porous, glass-rich materials like ash, pumice, and cinders. Unlike conventional weathering that yields crystalline clays, these vitreous materials undergo rapid hydrolysis, releasing reactive silica, aluminum, and iron. Instead of forming stable layered silicates, these components quickly recombine to form amorphous or short-range-order minerals, such as allophane and imogolite, which possess enormous specific surface areas and variable charge. The profile exhibited a typical Ah-AC-C horizon sequence. Located in Wudalianchi, Heilongjiang.

Position: 126°7′E, 48°45′N



Morphological descriptions

Horizon	Depth (cm)
Ah	0~14
AC	14~101
C	101~130

SITE 4: Beidahuang Group Hongxing Farm for inspection, Bei'an

BACKGROUND:

- Located at the southern foot of the Xiaoxing'an Mountains in Beian City, Heilongjiang Province, the farm covers an area of 392.61 square kilometers.
- Situated in the core zone of the black soil belt, the area is characterized by hilly terrain and a cold-temperate continental climate.
- The farmland mostly consists of rolling hills with fertile soil, making it well-suited for cultivation.

SITE 5: Wuying National Forest Park, Yichun

BACKGROUND:

- Yichun is renowned as the “Hometown of Korean Pines”, and Wuying is a “green gem” within this hometown. It is ancient and magical, primitive and glorious.
- It is called ancient because the Korean pines in its primitive forest are relic species from the Tertiary period; magical because the negative oxygen ions released by the primitive forest have high medicinal and health benefits; primitive because the oldest pines in the forest are over 600 years old; and glorious because this area was once a rear base for the Northeast Anti-Japanese United Army.
- Scenic spots within the park include Songxiang Bridge, Tianci Lake, the “Shaoqi” Forest Train, Huxiao Mountain, Bird Forest, Forest Bathing Area, etc.

REFERENCES:

Soil Classification References, World Reference Base (WRB) & Chinese Soil Taxonomy:

https://www.fao.org/soils-portal/data-hub/soil-classification/world-reference-base/en/

China's Third National General Detailed Soil Survey

Harbin Official Tourism Site: https://wlt.hlj.gov.cn/

The Wudalianchi Scenic Area: https://www.chinawdlc.org.cn/

Wuying National Forest Park: http://www.ycsty.com/index.php