**Session Proposal**

1. **Session Title**  
   Conservation and restoration of black soils in agro-ecosystems
2. **Session Organizers**   
   Prof. Xinhua Peng, Institute of Agricultural Resources and Regional Planning, CAAS, [pengxinhua@caas.cn](mailto:pengxinhua@caas.cn), primary contact person
3. **Session Description**

This session will comprehensively explore the multifaceted aspects of black soils. Black soils, renowned for their high fertility and unique physical and chemical properties, are the backbone of many agricultural systems worldwide. However, they are increasingly under threat from various factors such as soil erosion caused by improper land use practices, degradation due to intensive farming, and the impacts of climate change. Experts are encouraged to present researches on soil management practices that can enhance the productivity and health of black soils, as well as strategies for restoring degraded black soils. Furthermore, case studies from different regions with black soil distribution highlighting successful restoration techniques and the challenges faced in implementing sustainable soil management strategies are very welcomed. The session will also explore the role of black soils in carbon sequestration and their contribution to global climate change mitigation. It aims to provide a platform where soil scientists, agronomists, farmers, and policymakers can exchange ideas, share experiences, and work towards developing comprehensive and effective measures for the conservation, restoration, and sustainable use of black soils.

1. **Format**   
   Oral presentations with Q&A sessions