

## Tour Announcement

# **Use of sandy soils in the context of regional soil diversity and soil productivity**

on March 20st, 2010

Dear participants,

Welcome to Berlin. It is our pleasure to invite you on a tour of the area surrounding Berlin. Here we can introduce you to the landscape, soils and varied land uses of the area. We will visit a farm where the wide range of site factors that are typical for the region present a challenge as well as an opportunity to farm in a sustainable and competitive manner. At the Teaching and Research station of the Faculty of Agriculture and Horticulture you get information about the long-term field experiments on sandy soils maintained here since more than 70 years.

The area of interest lies in the State of Brandenburg around 50 km southwest of Berlin in a typical glacial landscape. There we will show 5 soil profiles within a relatively small area that represent typical sites for arable land, grassland and forest. For each profile, agronomic information for the crops cultivated including expected yield will be presented. In addition, the limitations for use resulting from site factors as well as the risks resulting from improper management practices will be discussed.

The first two profiles are located on ground moraine plains, which are preferentially used as arable land in northern Germany. In Brandenburg's relatively dry climate, these sites are characterized by a water deficiency. The first profile represents one of the worst, the second one of the best cropping sites in the region. Both, however, are only considered moderately productive soils when seen on a national level.

Profile number 3 and 4 are located in a depression within a wide valley called the "Berliner Urstromtal". The influence of ground water, regulated through a complex system of drainage ditches, is typical for this kind of site. Depending on the water table, mineral sandy soils or organic soils alternate, and are used as arable land or grassland respectively. Here we will look at an excessively drained sandy soil, which is usually suitable for cropping as well as an imperfectly drained organic soil, typical for grassland.

Our tour ends at a site only suitable for forestry. Sand dunes were formed here as a result of deforestation and the resulting wind erosion that occurred around 200 to 400 years ago. Soil development took place in the dry and unfertile eolian sand.

Last but not least, a few organisational details:

**We will begin Saturday March 20<sup>st</sup>, 2010 at 8:00 in the main building of the Faculty of Agriculture and Horticulture at Invalidenstraße 42 and expect to return at 18:30. Lunch is planned for around 12:30 during the stop on the farm and is included in the fee for the tour.**

**Even though the tour will take place a day before the beginning of spring, we kindly ask you to dress for cold and wet weather. Please also remember appropriate footwear for the wet sites.**