

6.1. Bioscience Research Sub-theme

Eastern part of Ethiopia is rich in plant and animal diversity. Biodiversity provides ecosystem services, and forms an integral part of the rural economy, providing subsistence, goods and medicines. However, research on biodiversity, particularly from the point of view of their ecology and conservation status; use to the local people and potentials for pharmaceuticals and industrial purposes; responses to abiotic and biotic stresses are lacking. As a result, biodiversity is being lost together with indigenous knowledge of people around them. The biosciences research sub-theme, therefore, set out a research priority to study 'Plant and Animal Biodiversity' from the following specific project components stand point.

- Ecological and ethno-botanical investigations of vegetations of different ecosystems of eastern Ethiopia;
- Phytochemical and bioactivity studies of ethno-medicinal plants;
- Antioxidant properties of ethno-medicinal plants;
- Evaluation of non-food plants for bio-fuel potential;
- Impact of climate change on plant performance;
- Marker assisted genetic diversity study of plants of economic importance;
- Ethnozoology and wildlife ecology;
- Molecular characterization and species diversity of animals;
- Eco-epidemiology and transmission of parasites.