

## **Project Update: December 2018**

I have conducted two round field data collection for the survey of indigenous tree assessment and collection of traditional medicinal plants for in-vitro antimicrobial test species those which scores high key informant consensus factor and fidelity levels. In this report the following activities were compiled:

1. Assessment of indigenous tree species of mature tree with abundance, height (greater than 3 m) and DBH (greater than 2.5 cm), sapling abundance (greater than 1 m and less than 3 m) and seedling abundance (less than 1 m) at Yegana and Gajilo remnant natural forests in Menz Gera District, Amhara region, Ethiopia.
2. Ethno-medicinal data related to human and animal traditional medicinal plants and associated indigenous knowledge were collected and analysed.
3. Full information on medicinal plant parts used, modes of remedy preparation, routes of remedy administration and dosages were documented and analysed.
4. Based on activity 2 and 3 medicinal plants with high key informant consensus factor, high fidelity level and those of not done for anti-microbial test so far from my study area were selected for anti-microbial test laboratory. Based on this eight traditional medicinal plants were selected and the following activities were done:
  - a) Safely collected from their natural habitat by aerated container.
  - b) Dried at room temperature at Debre Berhan University, Biology Department laboratory.
  - c) Crushed using universal miller at Debre Berhan University, Chemical engineering department.
  - d) Powders were kept at room temperature safely till maceration Debre Berhan University, Biology Department laboratory.

### **Activities ongoing**

1. Data entry and analysis of indigenous tree natural regeneration status by considering abundance of mature trees, saplings and seedlings.
2. Maceration of powdered samples by 80% ethanol.
3. Filtration using what man paper number one.
4. Removing of solvents by rota evaporator vacuum.
5. Anti-microbial test of the extracted traditional medicinal plants using disk diffusion methods.

### **Coming activities**

Analysis, writing up of the final dissertation and preparing of articles for publications at know journals.

### **Opportunities**

- ✓ Financial support from RSG 2.
- ✓ Laboratory access at Debre Berhan University and Addis Ababa University.

## Challenges

Here laboratories at Ethiopia is not well equipped to perform all necessary laboratory activities.



Partial view of Menz Guassa study area



Data collection from Gajlo natural Forest



Medicinal plants collection from key informant



*Inula confertiflora* A. Rich. Asteraceae



Drying of *Osyris quadripartita* Decn. Santalaceae



*Solanum incanum* L. Solanaceae



Crushing of dried sample