Project Update: May 2020

Even though Covid 19 pandemic is getting worst in Ethiopia and makes data collection trips difficult, so far am doing well. Just to share you some photos and activities going on with my wok.

Activities

Field data collection, monitoring and recording the growth of *Helichrysum splendidum*

Monthly monitoring and recording the growth of *Helichrysum splendidum* removed from the selected plots (the detail was stated in my first report) is being conducted.

Figure 1: Germination of Helichrysum splendidum removed from the selected plot

Table 1: Monthly monitoring and recording the growth of *Helichrysum splendidum*.

Species	**Months**	**Plot in which seedlings seen**	**Number of seedlings seen**
Helichrysum splendidum	September	Not seen	
	October	Not seen	
	November	Not seen	
	December	Not seen	
	January	Not seen	
	February	4, 5, 6, 7, 8, 9, 11, 17	3, 1, 1, 5, 2, 2, 3, 4

	March	4, 5, 6, 7, 8, 9, 11, 17	5, 4, 6, 7, 4, 6, 4, 7
	April		
	May		
	June		

Soil seed bank germination in the glasshouse: watering, monitoring the growth and recording

Watering is being done for 480 soil samples collected from the three separate soil layers (0-3 cm, 3-6 cm and 6-9 cm), that were transferred to the prepared plastic trays in Addis Ababa University glasshouse site. Germination is currently going on in a very good manner. For those germinating seeds, counting and identification of the species is also moving on the right track.

Figure 2: Watering the germinating seedlings

Species Identification

All the collected specimens from the established plots are identified recorded and will be stored in the National Herbarium of Addis Ababa University.

Table 2: List of species with their family and habit recorded from established plots of the Guassa community conserved area

Scientific name of species with authority name(s|)	Family name	Habit
Alchemilla abyssinica Fresen.	Rosaceae	H

Alchemilla ellenbecki Engl.	Rosaceae	H
Alchemilla kiwuensis Engl.	Rosaceae	H
Anchusa affinis R.Br. ex DC.	Boraginaceae	H
Andropogon lima (Hack.) Stapf	Poaceae	H
Andropogon amethystinus Steud.	Poaceae	H
Anthemis tigreensis J. Gay ex A. Rich.	Asteraceae	H
Argyrolobium ramosissimum Bak.	Fabaceae	H
Argyrolobium rupestre (E. Mey.) Walp.	Fabaceae	H
Artemisia abyssinica Sch. Bip. ex A. Rich.	Asteraceae	H
Carduus schimperi Sch. Bip. ex A. Rich.	Asteraceae	H
Carex conferta Hochst. ex A. Rich	Cyperaceae	H
Carex monostachya A. Rich.	Cyperaceae	H
Cineraria abyssinica Sch. Bip. ex A. Rich.	Asteraceae	H
Conyza pyrrhopappa Sch. Bip. ex A. Rich.	Asteraceae	SH
Conyza stricta Willd	Asteraceae	H
Crassula alba Forssk.	Crassulaceae	H
Cynoglosum amplifolium Hochst. ex A. DC.	Boraginaceae	H
Cynoglosum coeruleum Hochst. ex A. DC.	Boraginaceae	H
Cyperus elegantulus Steud.	Cyperaceae	H
Cyperus rigidifolius Steud.	Cyperaceae	H
Dicrocephala chrysanthemifolia DC.	Asteraceae	H
Dipsacus pinnatifidus Steud. ex A. Rich.	Dipsacaceae	H
Epilobium stereophyllum Fresen.	Onagraceae	H
Erica arborea L.	Ericaceae	SH
Erigeron alpinus L.	Asteraceae	H
Euryops pinifolius A. Rich.	Asteraceae	SH
Festuca abyssinica, Hochst. ex A. Rich.	Poaceae (Gramineae)	H
Festuca macrophylla Hochst. ex A. Rich.	Poaceae (Gramineae)	H
Festuca richardii	Poaceae (Gramineae)	H
Galium simense Fresen.	Rubiaceae	H
Hedbergia abyssinica (Hochst. ex Benth.	Scrophulariaceae	H
Helichrysum formosissimum Sch. Bip. ex A. Rich.	Asteraceae	H
Helichrysum stenopterum DC.	Asteraceae	H
Helichrysum forsskahlii (J.F. Gmel.) Hilliard& Burtt	Asteraceae	H
Helichrysum splendidum (Thumb.) Less	Asteraceae	SH
Helictotrichon elongatum (Hochst. ex. A. Rich.) C. E. Hubb.	Poaceae (Gramineae)	H
Hesperantha petitiana (A. Rich.) Baker	Iridiaceae	H
Hypericum revolutum Vahl	Hypericaceae	SH
Isolepis costata A. Rich.	Cyperaceae	H
Kniphofia foliosa Hochst.	Asphodelaceae	H
Lobelia rhynchopetalum Hemsl.	Lobeliaceae	H
Luzula abyssinica Parl.	Juncaceae	H
Nepeta azurea R.Br. ex Benth.	Lamiaceae (Labiatae)	H
Peucedanum mattirolii Chiov.	Apiaceae	H
Pimpinella oreophila Hook.	Apiaceae	H

Plectocephalus varians (A. Rich.) C. Jeffrey ex. Cufod.	Asteraceae	H
Ranunculus multifidus Forssk.	Ranunculaceae	H
Rhabdotosperma scrophularifolia (Hochst. ex A. Rich.) Hartle	Scrophulariaceae	H
Rumex abyssinicus Jacq.	Polygonaceae	H
Rumex nepalensis Spreng.	Polygonaceae	H
Rytidosperma subulata (A. Rich.) Cope	Poaceae (Gramineae)	H
Salvia merjamie Forssk.	Lamiaceae (Labiatae)	H
Satureja pseudosimensis Brenan	Lamiaceae (Labiatae)	H
Scabiosa columbaria L.	Dipsacaceae	H
Senecio ragazi Chiov.	Asteraceae	H
Senecio schulzii Hochst. ex. A. Rich.	Asteraceae	H
Senecio steudelii Sch. Bip. ex A. Rich.	Asteraceae	H
Senecio subsessilis Oliv. & Hiern	Asteraceae	H
Silene macrosolen A. R.ich.	Caryophyllaceae	H
Swertia kilimandscharica Engl.	Gentianaceae	H
Trifolium polystachyum Fresen.	Fabaceae	H
Trifolium usambarense Taub.	Fabaceae	H
Urtica simensis Steudel	Urticaceae	H
Verbascum sinaiticum Benth.	Scrophulariaceae	H

(Note: H = Herb, SH = Shrub)

Ongoing activities

Writing of the reports and publications for scientific papers

Challenges

Covid 19 pandemic makes travel for data collection very difficult. Due to state of emergency declared by the government, there is a travel ban in Ethiopia making data collection trip very tricky.