

**Supplementary Table 1.** List of soil samples used in the study based on their collection Regional States and zones

<b>Site code</b>	<b>Region</b>	<b>Zone</b>	<b>Woreda/ district</b>	<b>Kebele</b>	<b>Altitude (m)</b>	<b>Longitude (North )</b>	<b>Latitude (East)</b>
E19	Amhara	Semien Shoa	Kewet	Abayatir	1373	09.55.11.0	040.01.42.3
E19	Amhara	Semien Shoa	Kewet	Abayatir	1371	09.55.09.51	040.01.41.9
E19	Amhara	Semien Shoa	Kewet	Abayatir	1376	09.55.09.9	040.01.42.2
E19	Amhara	Semien Shoa	Kewet	Abayatir	1375	09.55.11.5	040.01.42.4
E29	Amhara	Oromia	Artuma Fursi	Jara Kichini	1453	10.30.53.3	039.58.47.7
E29	Amhara	Oromia	Artuma Fursi	Jara Kichini	1457	10.30.54.2	039.58.47.7
E29	Amhara	Oromia	Artuma Fursi	Jara Kichini	1458	10.30.54.4	039.58.47.9
E29	Amhara	Oromia	Artuma Fursi	Jara Kichini	1457	10.30.53.3	039.58.47.2
E40	Tigray	West Tigray	Qafta Humera	Maykedira	635	14.10.26.8	036.36.11.3
E40	Tigray	West Tigray	Qafta Humera	Maykedira	635	14.10.27.4	036.36.11.3
E40	Tigray	West Tigray	Qafta Humera	Maykedira	634	14.10.27	036.36.10.1
E40	Tigray	West Tigray	Qafta Humera	Maykedira	633	14.10.27.1	036.36.10.3