

Supporting Information

Ayele T.B., Gailing O., Finkeldey R., 2017. Spatial distribution of genetic diversity in populations of *Hagenia abyssinica* (Bruce) J.F. Gmel from Ethiopia. Ann. For. Res. 60(1): _-_.

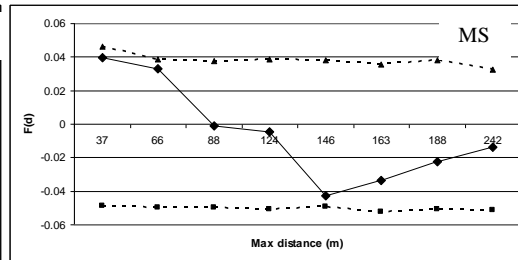
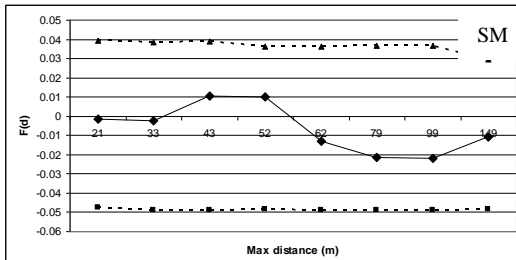
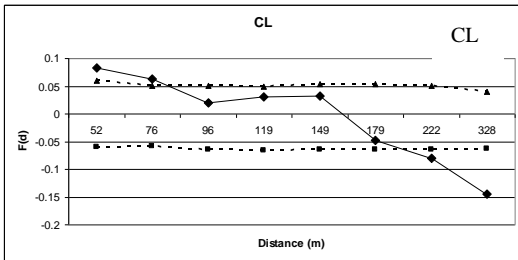
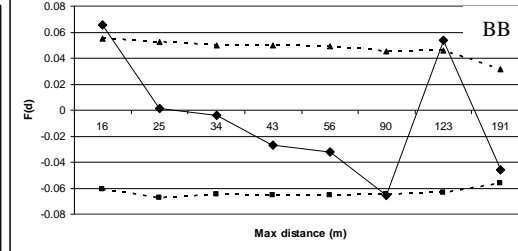
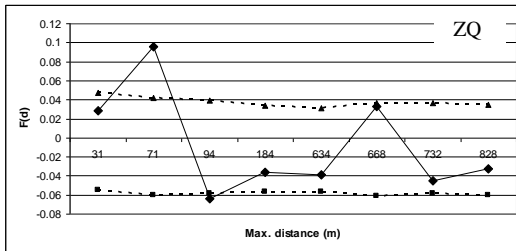
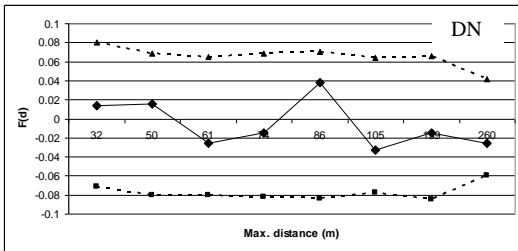
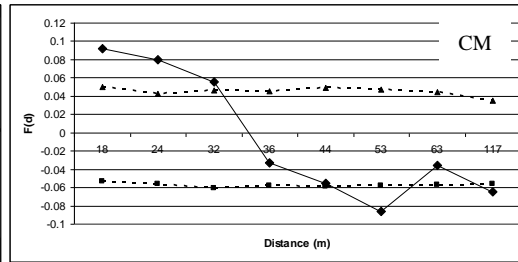
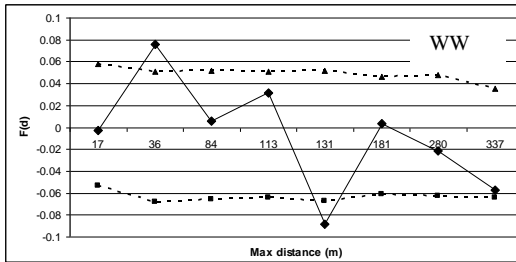
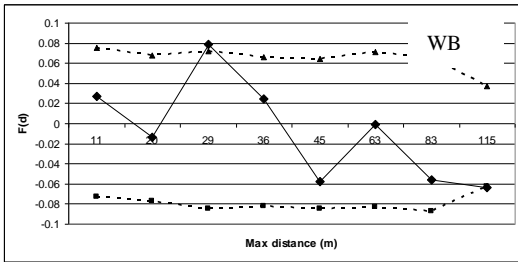
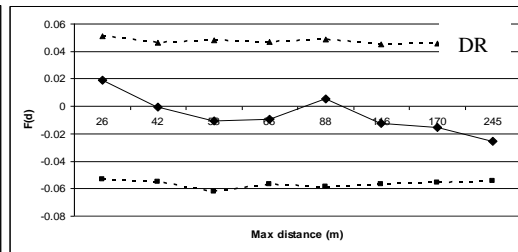
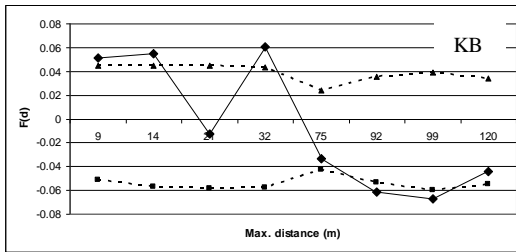
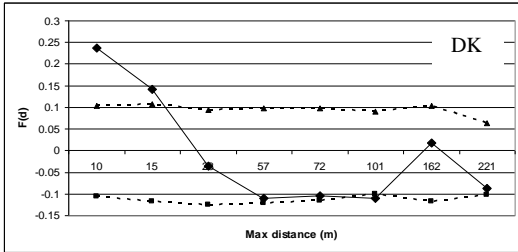
Supporting Information 1 The grouping of the sampled *H. abyssinica* populations that were used to examine the partitioning of genetic diversity at AFLP loci

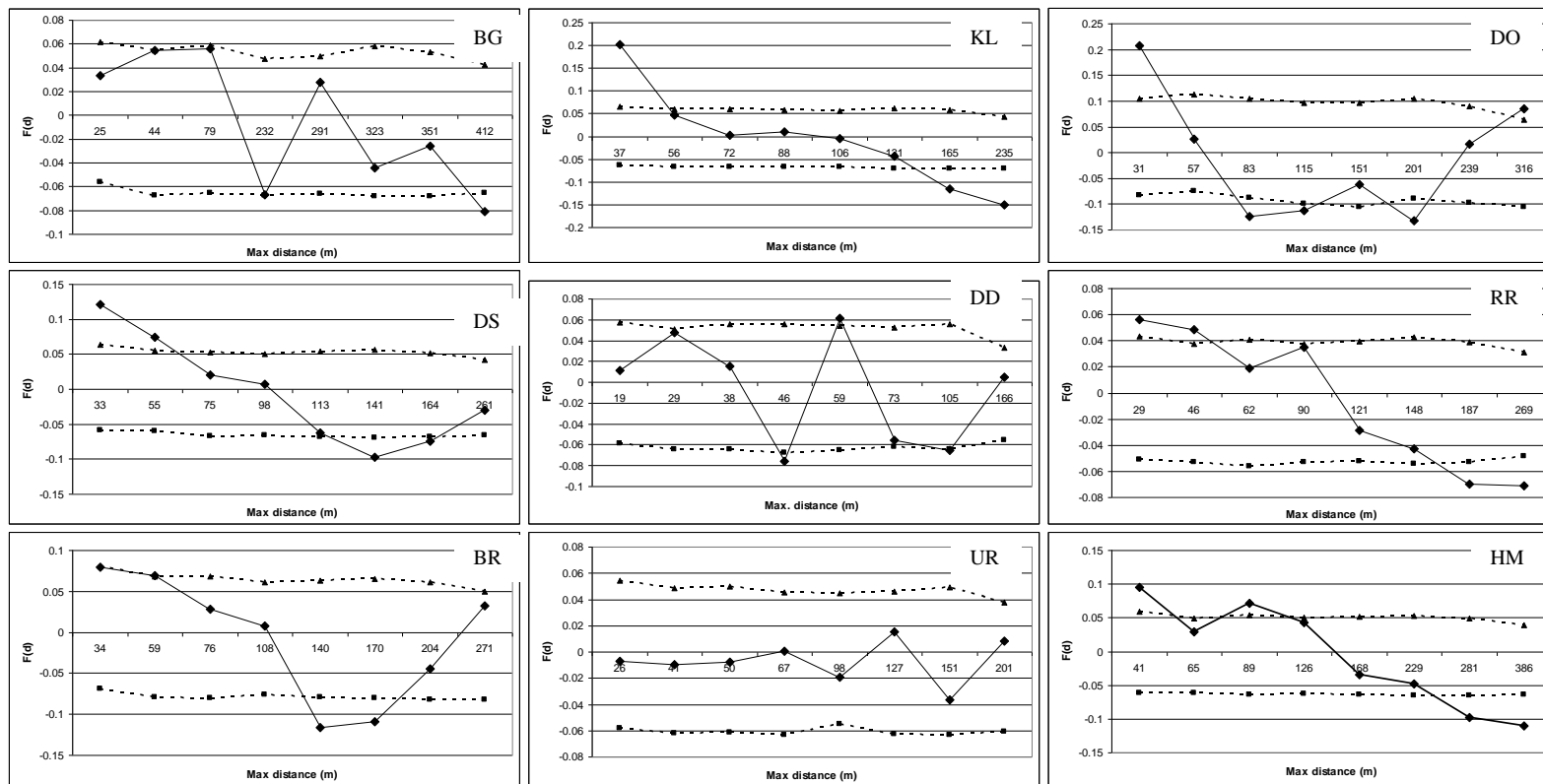
	No. of populations	List of populations ^a
Micro-ecosystem types of sampled populations		
Closed forest	12	DO, ZQ, BB, MS, SM, UR, KB, DN, DR, BG, CM, DD
Open forest/woodland	6	WW, CL, WD, RR, DK, WB
Farm land/ Homestead	2	DS, HM
Wooded grassland	2	BR, KL
Plantation	3	DKP, SMP, KDP
Types of <i>Hagenia</i> forest stands		
Mixed stand, sparse <i>Hagenia</i>	8	ZQ, BB, MS, SM, UR, DN, DR, CM,
<i>Hagenia</i> -dominated mixed stand	12	DO, KB, BG, DD, WW, CL, WD, RR, WB, HM, BR, KL
Pure <i>Hagenia</i> stand	2	DS, DK
Plantation	3	DKP, SMP, KDP
Geographic regions		
Northern	7	DK, DKP, DR, KB, WB, WD, KDP
Central	5	WW, CL, DN, CM, ZQ
South-western	4	BB, BG, SM, SMP
Southern	9	BR, KL, DS, HM, DO, MS, UR, DD, RR
Chloroplast lineages		
Lineage I	9	DK, DKP, KDP, WD, DR, WB, SM, SMP, BG
Lineage II	16	BB, BR, CL, CM, DD, DN, DO, DS, HM, KB, KL, MS, RR, UR, WW, ZQ
Tree seed zones^b		
15.3	1	WD
17	4	CM, DO, DD, DS
19	2	DK, KDP
20.1	2	KB, WB
20.2	2	WW, DR
20.3	1	ZQ
20.4	1	CM
21.1	1	MS
21.2	1	DN
23.2	1	SM
23.3	2	BG, BB
24.1	4	KL, BR, UR, HM
24.2	1	RR

^aPopulation codes follow Table 1; ^bFor details on tree seed zone descriptions, refer to Aalbæk, A. (1993). Tree seed zones for Ethiopia. National Tree Seed Project, Addis Ababa.



Supporting Information 2 A female *Hagenia* tree demonstrating a very good quality timber from Uraga population, South Ethiopia. The inset picture shows male flowers. Photo: Taye B. Ayele.





Supporting Information 4 Correlograms showing kinship coefficient ($F(d)$) averaged over distance classes and plotted against the maximum distances of 8 distance classes from AFLPs of 21 natural populations of *Hagenia abyssinica*. Descriptions of plots: solid line with diamond marks = observed values; broken line with triangle marks = upper bound of 95% confidence interval; broken line with square marks = lower bound of 95% confidence interval. For population codes refer to Table 1.

Supporting Information 5 Comparison of the genetic diversity of *H. abyssinica* with other species at AFLPs

Species name	Family	Pollinator	H_e^a	G_{ST}/F_{ST}^b	Reference
<i>H. abyssinica</i>	Rosacea	wind	0.195	0.077	Present work
<i>Dipterocarpus</i> cf. <i>condorensis</i>	Dipterocarpaceae	insect	0.215	0.111	Luu 2005
<i>Lobelia giberroa</i>	Apocynaceae	bird	0.066	na ^c	Kebede <i>et al.</i> 2007
<i>Shorea leprosula</i>	Dipterocarpaceae	insect	0.161	0.25	Cao <i>et al.</i> 2006
<i>Shorea parvifolia</i>	Dipterocarpaceae	insect	0.138	0.31	Cao <i>et al.</i> 2006
<i>Acer skutchii</i>	Sapindaceae	insect & wind	0.15	0.075	Lara-Gomez <i>et al.</i> 2005
<i>Pelliciera</i> <i>rhizophorae</i>	Pellicieraceae	bird	0.117	0.265	Castillo-Cárdenas <i>et al.</i> 2005
<i>Cordia africana</i>	Boraginaceae	insect	0.287	0.072	Derero 2007
<i>Juniperus procera</i>	Cupressaceae	wind	0.269	0.041	Sertse 2010
<i>Hibiscus tiliaceus</i>	Malvaceae	insect	0.198	0.152	Tang <i>et al.</i> 2003
<i>Acanthopanax</i> <i>sessiliflorus</i>	Araliaceae	wind	0.187	0.069	Huh <i>et al.</i> 2005
<i>Malus sylvestris</i>	Rosaceae	insect	0.225	0.05	Coart <i>et al.</i> 2003

^a H_e = Nei's gene diversity; ^b G_{ST}/F_{ST} = Population differentiation; ^cna= not available