

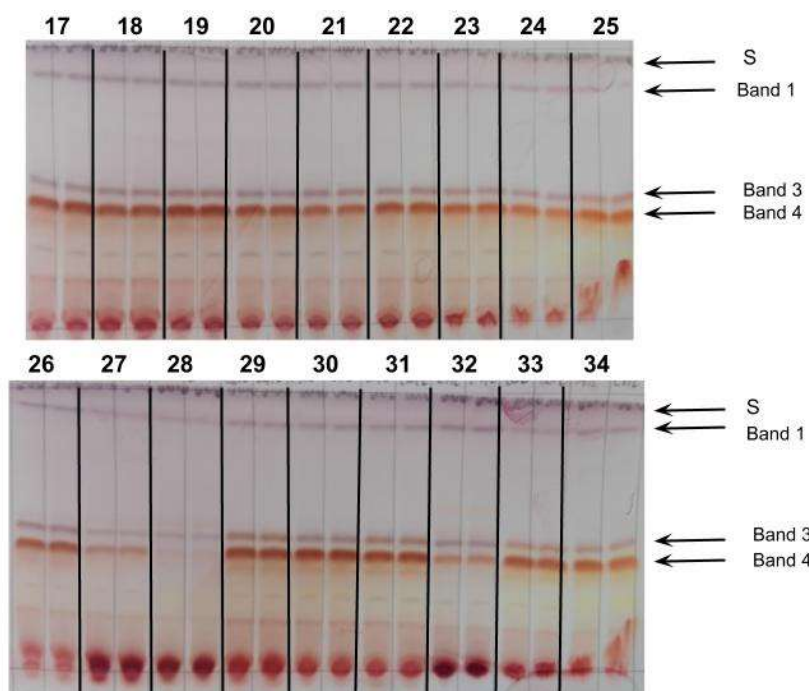


Figure S1: A subset from a total of 109 rooibos ecotypes analyzed with the described TLC method. Plants 17-25,26,29-31,34 = Commercial; plant 27,28,32,33= wild-growing. S: solvent front.

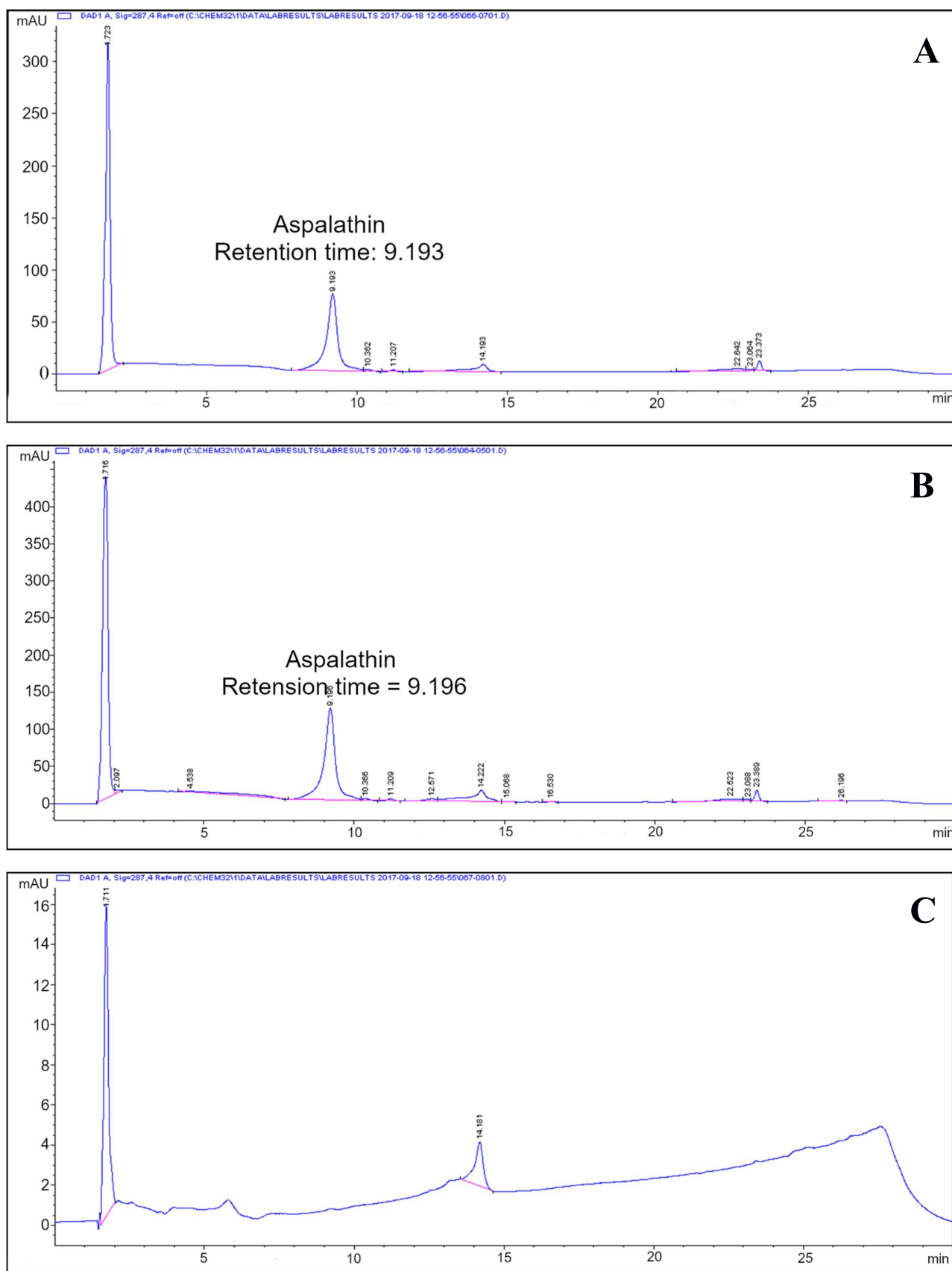


Figure S2: HPLC-DAD and UPLC-MS chromatograms of the preparative TLC extracts at $R_F = 0.46$ suspected to contain aspalathin. The chromatograms A and B are TLC silica extracts from plants

1 and 2, verifying the presence of aspalathin at retention time = 9.1 min. The chromatogram C is a silica extract at $R_F = 0.46$ from a TLC of an aspalathin negative plant 3, verifying no aspalathin at the equivalent position.

Table S1. Description of a subset from the sampled rooibos plants

Plant	Growth types	Location	Region
17	Commercial rooibos plant	S032° 47' 22" E18° 48' 26"	Clanwilliam
18	Commercial rooibos plant	S032° 47' 22" E18° 48' 26"	Clanwilliam
19	Commercial rooibos plant	S032° 40' 06" E18° 38' 10"	Clanwilliam
20	Commercial rooibos plant	S032° 40' 06" E18° 38' 10"	Clanwilliam
21	Commercial rooibos plant	S032° 40' 07" E18° 38' 09"	Clanwilliam
22	Commercial rooibos plant	S032° 40' 07" E18° 38' 09"	Clanwilliam
23	Commercial rooibos plant	S032° 40' 07" E18° 38' 09"	Clanwilliam
24	Commercial rooibos plant	S031° 43' 09" E019° 08' 25"	Nieuwoudtville
25	Commercial rooibos plant	S031° 43' 09" E019° 08' 25"	Nieuwoudtville
26	Commercial rooibos plant	S031° 43' 09" E019° 08' 25"	Nieuwoudtville
27	Nieuwoudtville sprouter	S031° 42' 13" E019° 07' 26"	Nieuwoudtville
28	Nieuwoudtville sprouter	S031° 42' 13" E019° 07' 27"	Nieuwoudtville
29	Commercial rooibos plant	S031° 43' 17" E019° 07' 29"	Nieuwoudtville
30	Commercial rooibos plant	S031° 43' 18" E019° 07' 31"	Nieuwoudtville
31	Commercial rooibos plant	S031° 43' 18" E019° 07' 32"	Nieuwoudtville
32	Nieuwoudtville sprouter	S031° 45' 48" E019° 07' 54"	Nieuwoudtville
33	Black type	S031° 45' 48" E019° 07' 54"	Nieuwoudtville
34	Commercial rooibos plant	S031° 47' 22" E019° 06' 51"	Nieuwoudtville