

Table S1. Cuticular hydrocarbon composition of *Neosilba certa* using *Psidium guajava* as host plant, *Neosilba inesperata* using *Prunus persica*, and *Neosilba perezii* using *Manihot esculenta*.

RI	Compound	Relative abundance (%) (mean $\pm$ SD)		
		<i>N. certa</i> (n = 13)	<i>N. inesperata</i> (n = 14)	<i>N. perezii</i> (n = 15)
2300	C ₂₃	7.44 $\pm$ 2.25	2.95 $\pm$ 0.98	-
2336	13-,11-,9-Me C ₂₃	40.33 $\pm$ 9.60	21.38 $\pm$ 5.87	-
2348	5-Me C ₂₃	-	1.78 $\pm$ 0.83	-
2571	3-Me C ₂₃	-	0.82 $\pm$ 1.06	-
2400	C ₂₄	1.19 $\pm$ 0.59	0.79 $\pm$ 0.76	-
2432	10-Me C ₂₄	1.95 $\pm$ 0.37	-	-
2438	8-Me C ₂₄	-	2.99 $\pm$ 0.89	-
2443	6-Me C ₂₄	-	0.46 $\pm$ 0.64	-
2481	C _{25:1}	-	1.20 $\pm$ 1.16	-
2500	C ₂₅	9.59 $\pm$ 3.77	8.67 $\pm$ 2.80	7.38 $\pm$ 1.26
2538	13-,11-,9-Me C ₂₅	3.90 $\pm$ 0.70	14.94 $\pm$ 5.69	16.30 $\pm$ 7.48
2541	7-Me C ₂₅	-	4.32 $\pm$ 4.00	-
2549	5-Me C ₂₅	-	1.68 $\pm$ 0.42	-
2573	3-Me C ₂₅	0.57 $\pm$ 0.50	1.45 $\pm$ 1.67	0.95 $\pm$ 0.77
2600	C ₂₆	0.64 $\pm$ 0.49	1.42 $\pm$ 0.34	1.01 $\pm$ 0.51
2631	12-,10-Me C ₂₆	0.10 $\pm$ 0.36	0.99 $\pm$ 0.70	2.87 $\pm$ 1.07
2655	4-Me C ₂₆	-	0.09 $\pm$ 0.34	-
2671	C _{27:1}	-	-	0.52 $\pm$ 0.80
2682	C _{27:1}	0.57 $\pm$ 0.49	0.28 $\pm$ 0.55	1.70 $\pm$ 1.02
2700	C ₂₇	13.70 $\pm$ 5.17	11.66 $\pm$ 1.60	11.80 $\pm$ 5.69
2731	13-,11-,9-Me C ₂₇	3.84 $\pm$ 3.10	6.50 $\pm$ 2.61	25.48 $\pm$ 4.53
2737	7-Me C ₂₇	0.82 $\pm$ 0.77	1.19 $\pm$ 0.87	0.82 $\pm$ 0.83
2760	2-Me C ₂₇	0.25 $\pm$ 0.48	0.10 $\pm$ 0.38	1.15 $\pm$ 1.12
2771	3-Me C ₂₇	2.53 $\pm$ 0.68	2.93 $\pm$ 0.74	2.86 $\pm$ 1.16
2800	C ₂₈	1.08 $\pm$ 0.55	0.97 $\pm$ 0.59	0.45 $\pm$ 0.65

RI	Compound	Relative abundance (%) (mean $\pm$ SD)		
		<i>N. certa</i> (n = 13)	<i>N. inesperata</i> (n = 14)	<i>N. perezi</i> (n = 15)
2836	12-,10-Me C ₂₈	-	-	2.46 $\pm$ 1.19
2860	2-Me C ₂₈	0.35 $\pm$ 0.73	-	-
2873	C _{29:1}	0.50 $\pm$ 0.62	0.09 $\pm$ 0.33	2.69 $\pm$ 0.98
2883	C _{29:1}	1.58 $\pm$ 0.92	0.69 $\pm$ 0.64	6.08 $\pm$ 1.43
2900	C ₂₉	3.45 $\pm$ 1.49	2.97 $\pm$ 0.93	3.56 $\pm$ 1.99
2928	13-,11-,9-Me C ₂₉	1.55 $\pm$ 1.10	2.95 $\pm$ 1.34	4.80 $\pm$ 1.44
2934	7-Me C ₂₉	0.06 $\pm$ 0.20	0.31 $\pm$ 0.89	0.89 $\pm$ 1.71
2971	3-Me C ₂₉	3.63 $\pm$ 1.28	3.46 $\pm$ 1.60	6.22 $\pm$ 1.75

Table S2. Cuticular hydrocarbon composition of *Neosilba glaberrima* using as host plants *Psidium guajava* or *Prunus persica*.

RI	Compound	Relative abundance (%) (mean $\pm$ SD)	
		<i>Psidium guajava</i> (n = 10)	<i>Prunus persica</i> (n = 5)
2300	C ₂₃	4.59 $\pm$ 0.38	6.79 $\pm$ 1.23
2336	13-,11-,9-Me C ₂₃	38.14 $\pm$ 7.08	29.67 $\pm$ 1.61
2571	3-Me C ₂₃	-	0.29 $\pm$ 0.64
2400	C ₂₄	0.58 $\pm$ 0.68	2.04 $\pm$ 0.11
2432	10-Me C ₂₄	2.53 $\pm$ 0.08	3.33 $\pm$ 0.28
2500	C ₂₅	6.69 $\pm$ 0.68	16.51 $\pm$ 0.51
2538	13-,11-,9-Me C ₂₅	10.88 $\pm$ 0.55	8.61 $\pm$ 0.65
2541	7-Me C ₂₅	0.47 $\pm$ 0.76	1.23 $\pm$ 0.71
2573	3-Me C ₂₅	0.39 $\pm$ 0.41	2.10 $\pm$ 0.10
2600	C ₂₆	-	1.54 $\pm$ 0.13
2631	12-,10-Me C ₂₆	0.07 $\pm$ 0.22	-
2682	7:C _{27:1}	1.15 $\pm$ 0.46	-
2700	C ₂₇	9.86 $\pm$ 2.34	16.80 $\pm$ 0.55
2731	13-,11-,9-Me C ₂₇	6.18 $\pm$ 1.87	1.02 $\pm$ 0.93
2737	7-Me C ₂₇	1.26 $\pm$ 0.54	-
2760	2-Me C ₂₇	0.43 $\pm$ 0.55	-
2771	3-Me C ₂₇	2.39 $\pm$ 0.89	0.21 $\pm$ 0.48
2800	C ₂₈	0.72 $\pm$ 0.34	1.03 $\pm$ 0.58
2900	C ₂₉	3.42 $\pm$ 0.75	4.65 $\pm$ 0.21
2928	13-,11-,9-Me C ₂₉	2.79 $\pm$ 0.38	-
2934	7-Me C ₂₉	0.08 $\pm$ 0.24	-
2971	3-Me C ₂₉	2.74 $\pm$ 0.32	1.59 $\pm$ 0.07
3052	2-Me C ₃₀	-	2.59 $\pm$ 0.16

Table S3. Cuticular hydrocarbon composition of *Neosilba pendula* using as host plants *Coffea arabica*, *Psidium cattleianum*, *Campomanesia phaea*, *Morus alba* or *Prunus persica*.

RI	Compound	Relative abundance (%) (mean $\pm$ SD)				
		<i>Coffea arabica</i> (n = 6)	<i>Psidium cattleianum</i> (n = 5)	<i>Campomanesia phaea</i> (n = 5)	<i>Morus alba</i> (n = 5)	<i>Prunus persica</i> (n = 5)
2300	C ₂₃	0.19 $\pm$ 0.46	0.52 $\pm$ 0.75	2.25 $\pm$ 0.96	0.87 $\pm$ 1.41	2.66 $\pm$ 1.72
2336	13-,11-,9-Me C ₂₃	2.72 $\pm$ 0.79	0.95 $\pm$ 0.63	2.35 $\pm$ 1.26	0.93 $\pm$ 1.24	3.24 $\pm$ 1.12
2371	Unknown	-	0.35 $\pm$ 0.50	0.44 $\pm$ 0.98	0.53 $\pm$ 1.17	0.27 $\pm$ 0.61
2571	3-Me C ₂₃	-	0.20 $\pm$ 0.46	1.72 $\pm$ 2.38	-	1.26 $\pm$ 1.35
2400	C ₂₄	1.22 $\pm$ 0.85	0.30 $\pm$ 0.41	0.94 $\pm$ 0.94	-	0.55 $\pm$ 0.76
2432	10-Me C ₂₄	1.78 $\pm$ 0.34	0.83 $\pm$ 0.52	2.54 $\pm$ 1.06	0.47 $\pm$ 0.44	2.10 $\pm$ 0.60
2481	C _{25:1}	-	-	0.92 $\pm$ 0.97	0.58 $\pm$ 0.96	0.58 $\pm$ 1.29
2500	C ₂₅	30.84 $\pm$ 8.16	4.85 $\pm$ 1.50	11.19 $\pm$ 4.61	3.25 $\pm$ 0.55	6.45 $\pm$ 1.82
2538	13-,11-,9-Me C ₂₅	44.59 $\pm$ 10.55	19.72 $\pm$ 6.17	26.12 $\pm$ 10.38	11.92 $\pm$ 6.01	31.35 $\pm$ 2.13
2573	3-Me C ₂₅	7.79 $\pm$ 0.89	1.07 $\pm$ 1.12	2.45 $\pm$ 0.90	0.35 $\pm$ 0.49	1.90 $\pm$ 0.41
2600	C ₂₆	1.66 $\pm$ 0.61	1.48 $\pm$ 0.42	1.63 $\pm$ 1.12	0.88 $\pm$ 0.58	1.33 $\pm$ 0.78
2631	12-,10-Me C ₂₆	0.61 $\pm$ 0.52	2.06 $\pm$ 1.15	2.28 $\pm$ 0.15	2.80 $\pm$ 0.30	2.85 $\pm$ 0.24
2671	9:C _{27:1}	-	0.49 $\pm$ 0.44	-	-	-
2682	7:C _{27:1}	-	0.99 $\pm$ 0.72	0.75 $\pm$ 0.45	0.65 $\pm$ 0.37	0.17 $\pm$ 0.37
2700	C ₂₇	0.30 $\pm$ 0.48	10.07 $\pm$ 1.79	13.13 $\pm$ 4.65	9.99 $\pm$ 0.96	9.57 $\pm$ 0.72
2731	13-,11-,9-Me C ₂₇	0.78 $\pm$ 0.45	29.90 $\pm$ 3.63	16.79 $\pm$ 3.62	39.40 $\pm$ 3.76	19.43 $\pm$ 3.50
2737	7-Me C ₂₇	-	0.17 $\pm$ 0.39	-	-	-
2760	2-Me C ₂₇	-	0.30 $\pm$ 0.41	-	0.28 $\pm$ 0.39	-
2771	3-Me C ₂₇	-	3.19 $\pm$ 0.21	3.32 $\pm$ 0.97	3.32 $\pm$ 0.56	2.29 $\pm$ 1.40
2781	5,11-DiMe C ₂₇	-	-	-	0.47 $\pm$ 0.73	0.46 $\pm$ 0.74
2800	C ₂₈	-	0.44 $\pm$ 0.60	0.64 $\pm$ 0.87	0.39 $\pm$ 0.35	0.46 $\pm$ 0.63
2836	12-,10-Me C ₂₈	-	2.63 $\pm$ 0.77	0.52 $\pm$ 0.72	2.96 $\pm$ 0.61	1.15 $\pm$ 1.05
2860	2-Me C ₂₈	-	0.13 $\pm$ 0.29	-	0.16 $\pm$ 0.35	-
2873	9-C _{29:1}	-	1.79 $\pm$ 0.46	0.45 $\pm$ 0.66	1.42 $\pm$ 1.02	0.37 $\pm$ 0.55
2883	7-C _{29:1}	-	1.98 $\pm$ 1.12	0.89 $\pm$ 0.82	2.98 $\pm$ 0.40	1.39 $\pm$ 0.78

RI	Compound	Relative abundance (%) (mean $\pm$ SD)				
		<i>Coffea arabica</i> (n = 6)	<i>Psidium cattleianum</i> (n = 5)	<i>Campomanesia phaea</i> (n = 5)	<i>Morus alba</i> (n = 5)	<i>Prunus persica</i> (n = 5)
2900	C ₂₉	-	1.83 $\pm$ 0.35	1.89 $\pm$ 1.49	1.50 $\pm$ 0.95	2.00 $\pm$ 0.37
2928	13-,11-,9-Me C ₂₉	-	8.49 $\pm$ 2.68	3.40 $\pm$ 1.03	9.22 $\pm$ 1.45	5.35 $\pm$ 2.58
2934	7-Me C ₂₉	-	0.33 $\pm$ 0.45	-	-	-
2971	3-Me C ₂₉	-	4.69 $\pm$ 0.58	3.40 $\pm$ 1.76	4.66 $\pm$ 0.76	2.82 $\pm$ 0.54
3100	C ₃₁	1.11 $\pm$ 0.99	0.22 $\pm$ 0.50	-	-	-
3173	3-Me C ₃₁	0.13 $\pm$ 0.31	-	-	-	-
3200	C ₃₂	0.86 $\pm$ 0.69	-	-	-	-
3300	C ₃₃	5.43 $\pm$ 2.12	-	-	-	-

Table S4. Cuticular hydrocarbon composition of *Neosilba zadolicha* using as host plants *Psidium guajava*, *Siparuna guianensis*, *Zizyphus oblongis* or *Annona coriacea*.

RI	Compound	Relative abundance (%) (mean $\pm$ SD)			
		<i>Psidium guajava</i> (n=5)	<i>Siparuna guianensis</i> (n=4)	<i>Zizyphus oblongis</i> (n=8)	<i>Annona coriacea</i> (n = 3)
2300	C ₂₃	4.44 $\pm$ 0.50	1.72 $\pm$ 0.82	8.31 $\pm$ 2.76	4.54 $\pm$ 1.70
2336	13-, 11-, 9-Me C ₂₃	42.90 $\pm$ 8.31	9.89 $\pm$ 4.44	33.33 $\pm$ 11.49	12.60 $\pm$ 4.86
2571	3-Me C ₂₃	0.93 $\pm$ 0.61	-	0.72 $\pm$ 1.74	-
2400	C ₂₄	0.57 $\pm$ 0.32	0.45 $\pm$ 0.52	1.09 $\pm$ 1.19	1.46 $\pm$ 0.81
2432	10-Me C ₂₄	2.58 $\pm$ 0.67	1.85 $\pm$ 1.65	2.99 $\pm$ 1.11	1.27 $\pm$ 0.35
2481	Unknown	-	0.38 $\pm$ 0.44	0.10 $\pm$ 0.28	-
2500	C ₂₅	7.96 $\pm$ 0.58	8.17 $\pm$ 2.28	7.91 $\pm$ 1.50	11.97 $\pm$ 7.25
2538	13-, 11-, 9-Me C ₂₅	9.91 $\pm$ 2.27	33.32 $\pm$ 9.15	8.18 $\pm$ 1.50	4.26 $\pm$ 1.62
2573	3-Me C ₂₅	0.38 $\pm$ 0.57	0.66 $\pm$ 0.76	-	-
2600	C ₂₆	0.64 $\pm$ 0.71	0.76 $\pm$ 0.10	-	1.47 $\pm$ 0.44
2631	12-,10-Me C ₂₆	-	1.56 $\pm$ 0.18	-	-
2671	9:C _{27:1}	-	0.46 $\pm$ 0.53	-	-
2682	7:C _{27:1}	0.13 $\pm$ 0.29	1.14 $\pm$ 0.38	0.34 $\pm$ 0.75	-
2700	C ₂₇	10.96 $\pm$ 3.85	11.97 $\pm$ 6.10	14.16 $\pm$ 2.96	28.70 $\pm$ 3.32
2731	13-, 11-, 9-Me C ₂₇	5.11 $\pm$ 0.57	8.69 $\pm$ 1.27	5.81 $\pm$ 1.55	4.12 $\pm$ 2.99
2760	2-Me C ₂₇	0.68 $\pm$ 0.93	0.34 $\pm$ 0.39	0.09 $\pm$ 0.26	-
2771	3-Me C ₂₇	2.06 $\pm$ 0.16	2.82 $\pm$ 1.17	1.82 $\pm$ 1.20	2.55 $\pm$ 0.43
2800	C ₂₈	0.94 $\pm$ 0.32	0.76 $\pm$ 0.91	0.69 $\pm$ 0.74	2.89 $\pm$ 0.68
2836	12-,10-Me C ₂₈	-	0.24 $\pm$ 0.48	-	-
2860	2-Me C ₂₈	1.77 $\pm$ 2.42	0.19 $\pm$ 0.38	-	0.60 $\pm$ 0.54
2873	9-C _{29:1}	-	1.54 $\pm$ 1.09	0.86 $\pm$ 0.87	0.41 $\pm$ 0.72
2883	7-C _{29:1}	0.56 $\pm$ 0.54	1.67 $\pm$ 0.40	2.12 $\pm$ 0.63	0.67 $\pm$ 0.65
2900	C ₂₉	2.97 $\pm$ 1.88	5.16 $\pm$ 3.44	4.72 $\pm$ 1.27	12.93 $\pm$ 2.22

RI	Compound	Relative abundance (%) (mean $\pm$ SD)			
		<i>Psidium guajava</i> (n=5)	<i>Siparuna guianensis</i> (n=4)	<i>Zizyphus oblongis</i> (n=8)	<i>Annona coriacea</i> (n = 3)
2928	13-,11-, 9-Me C ₂₉	2.12 $\pm$ 1.48	2.46 $\pm$ 0.82	2.73 $\pm$ 0.77	1.52 $\pm$ 1.50
2960	2-Me C ₂₉	-	-	-	0.30 $\pm$ 0.52
2971	3-Me C ₂₉	1.67 $\pm$ 0.98	3.80 $\pm$ 2.16	4.02 $\pm$ 1.49	7.74 $\pm$ 0.67

Table S5. Pairwise PERMANOVA p -values based on Bray-Curtis dissimilarities of cuticular hydrocarbon profiles among six *Neosilba* species reared from ten host fruits. Values indicate the probability of no significant difference between the chemical profiles of each species-host combination. Red-highlighted cells indicate statistically significant pairwise differences ($p < 0.05$).

	<i>N.certa</i> - <i>P.guajava</i>	<i>N.glaberrima</i> - <i>P. guajava</i>	<i>N.glaberrima</i> - <i>P. persica</i>	<i>N.inesperata</i> - <i>P. persica</i>	<i>N.pendula</i> - <i>C.arabica</i>	<i>N.pendula</i> - <i>P.cattleianum</i>	<i>N.pendula</i> - <i>C. phaea</i>	<i>N. pendula</i> - <i>M. alba</i>	<i>N.pendula</i> - <i>P.persica</i>	<i>N. perez</i> - <i>M.esculenta</i>	<i>N.zadolicha</i> - <i>P. guajava</i>	<i>N.zadolicha</i> - <i>S.guianensis</i>	<i>N. zadolicha</i> - <i>Z. oblongis</i>
<i>N. glaberrima</i> - <i>P. guajava</i>	0.0091												
<i>N. glaberrima</i> - <i>P. persica</i>	0.0910	0.0910											
<i>N. inesperata</i> - <i>P. persica</i>	0.0091	0.0091	0.0273										
<i>N. pendula</i> - <i>C. arabica</i>	0.0182	0.0364	0.1456	0.0091									
<i>N. pendula</i> - <i>P. cattleianum</i>	0.0091	0.0637	0.8008	0.0273	0.2366								
<i>N. pendula</i> - <i>C. phaea</i>	0.0091	0.0728	0.8008	0.0364	0.1911	0.7007							
<i>N. pendula</i> - <i>M. alba</i>	0.0182	0.0637	0.7189	0.0273	0.2821	1.0000	0.7553						
<i>N. pendula</i> - <i>P. persica</i>	0.0182	0.0728	0.7280	0.0182	0.1729	1.0000	1.0000	0.6734					
<i>N. perez</i> - <i>M. esculenta</i>	0.0091	0.0091	0.0364	0.0091	0.0182	1.0000	0.0182	0.0091	0.0637				
<i>N. zadolicha</i> - <i>P. guajava</i>	1.0000	1.0000	0.6916	0.0546	0.1729	0.6825	0.8190	0.7007	0.6552	0.0182			
<i>N. zadolicha</i> - <i>S. guianensis</i>	0.0455	0.1820	0.6916	0.4823	0.4641	0.7007	1.0000	0.6734	0.8554	0.0637	0.7098		
<i>N. zadolicha</i> - <i>Z. oblongis</i>	0.7553	0.1183	0.0455	0.0091	0.0637	0.0728	0.0728	0.0637	0.0728	0.0091	1.0000	0.1820	
<i>N. zadolicha</i> - <i>A. coriacea</i>	0.1820	0.6552	1.0000	0.1911	0.9100	1.0000	1.0000	1.0000	1.0000	0.1274	1.0000	1.0000	0.5278

Table S6. Pairwise PERMANOVA p-values based on Bray-Curtis dissimilarities of cuticular hydrocarbon profiles for *Neosilba pendula* reared from different host fruits. Red-highlighted cells correspond to statistically significant pairwise comparisons ($p < 0.05$).

	<i>N. pendula</i> - <i>C. arabica</i>	<i>N. pendula</i> - <i>P. cattleianum</i>	<i>N. pendula</i> - <i>C. phae</i>	<i>N. pendula</i> - <i>M. alba</i>
<i>N. pendula</i> - <i>P. cattleianum</i>	0.0260			
<i>N. pendula</i> - <i>C. phae</i>	0.0160	0.0710		
<i>N. pendula</i> - <i>M. alba</i>	0.0250	0.3980	0.0750	
<i>N. pendula</i> - <i>P. persica</i>	0.0200	0.1810	0.8200	0.0860

Table S7. Pairwise PERMANOVA p-values based on Bray-Curtis dissimilarities of cuticular hydrocarbon profiles for *Neosilba zadolicha* reared from different host fruits. Red-highlighted cells correspond to statistically significant pairwise comparisons ($p < 0.05$).

	<i>N. zadolicha</i> - <i>P. guajava</i>	<i>N. zadolicha</i> - <i>S. guianensis</i>	<i>N. zadolicha</i> - <i>Z. oblongis</i>
<i>N. zadolicha</i> - <i>S. guianensis</i>	0.0372		
<i>N. zadolicha</i> - <i>Z. oblongis</i>	0.2916	0.0114	
<i>N. zadolicha</i> - <i>A. coriacea</i>	0.1200	0.1644	0.0354

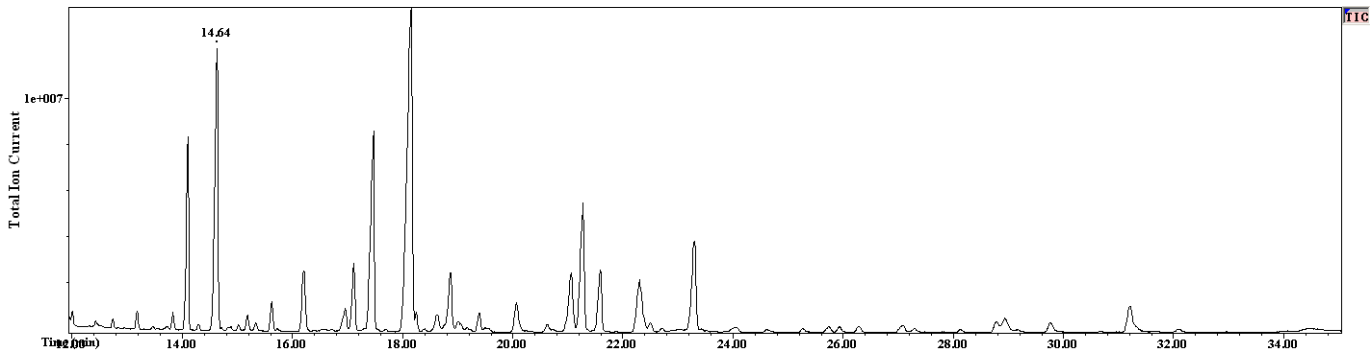


Figure S1. Representative cuticular hydrocarbon chromatogram of *Neosilba perezii*. This is the only chromatogram currently available, as the original diagnostic ion files could not be recovered.