

Supplementary material of the manuscript published in *Vitis* **59**, 155–162 (2020):

### Diverse and strain-specific metabolites patterns induced by fungal endophytes in grape cells of different varieties

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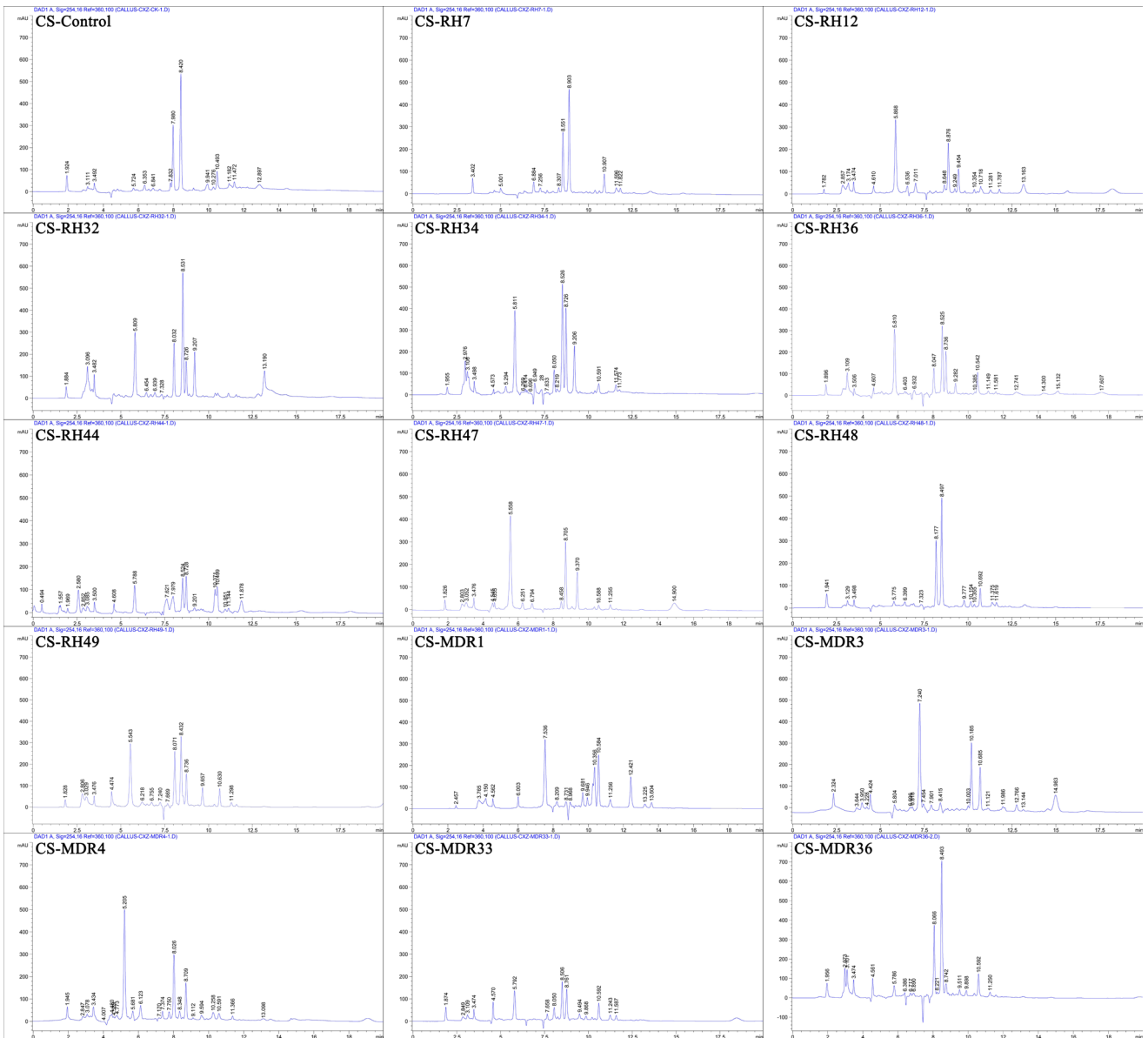
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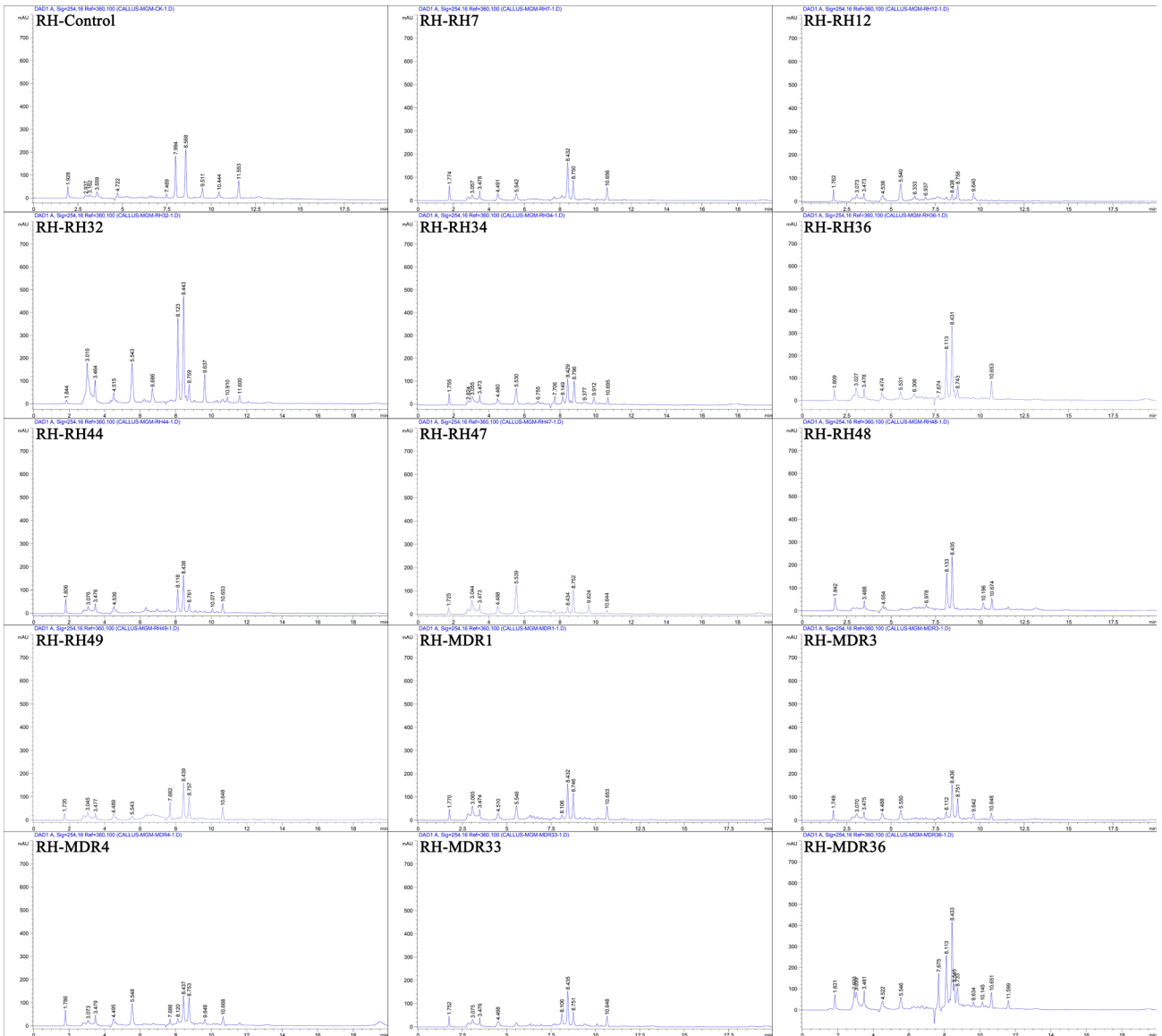
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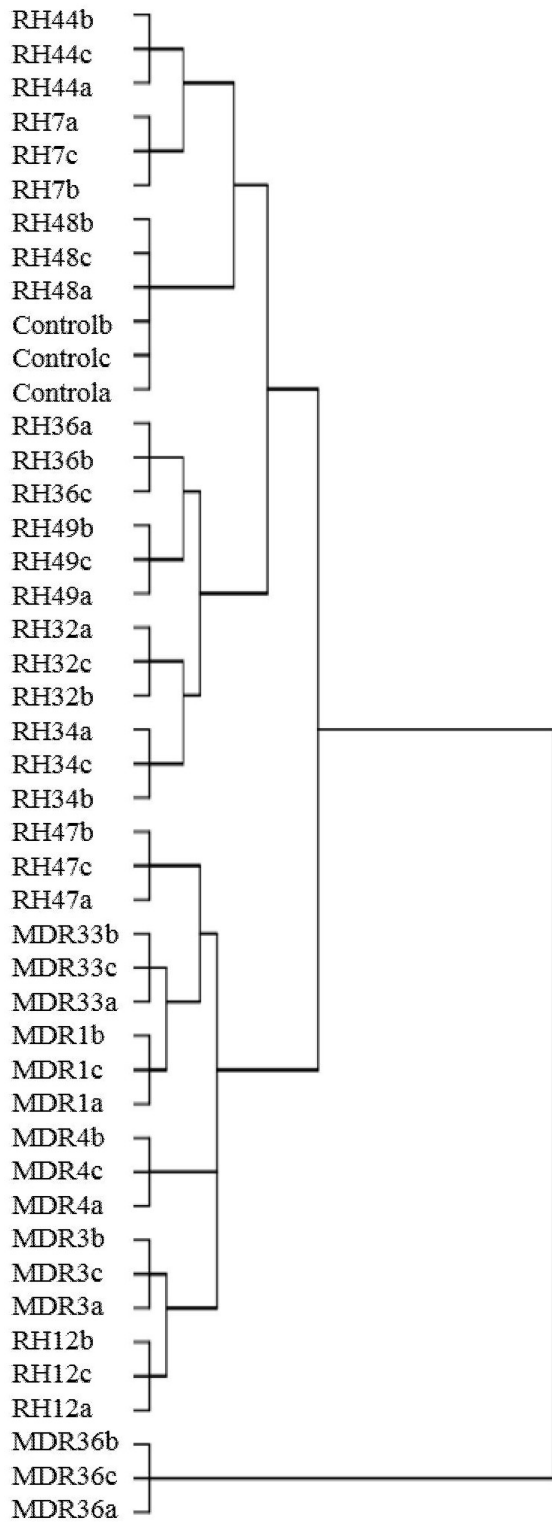
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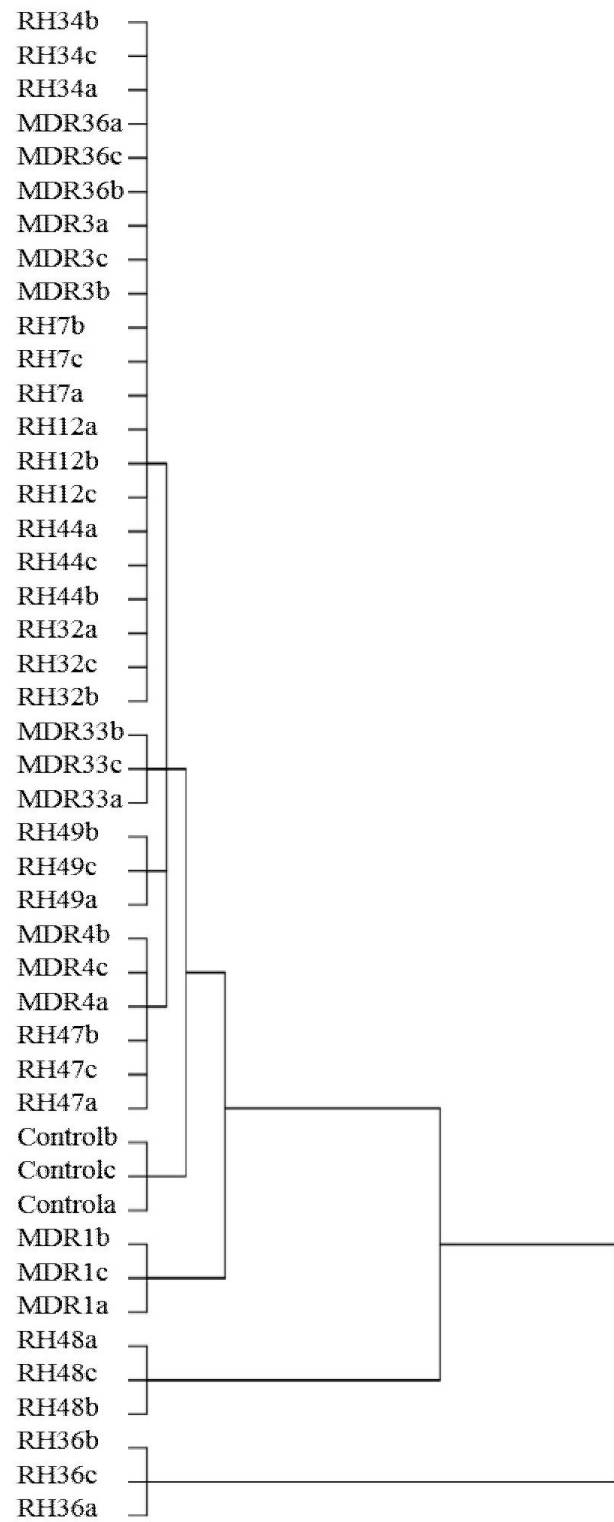
Supplementary Fig. 1: Chromatograms of CS grape cell extracts after co-culture with different endophytic fungal strains.



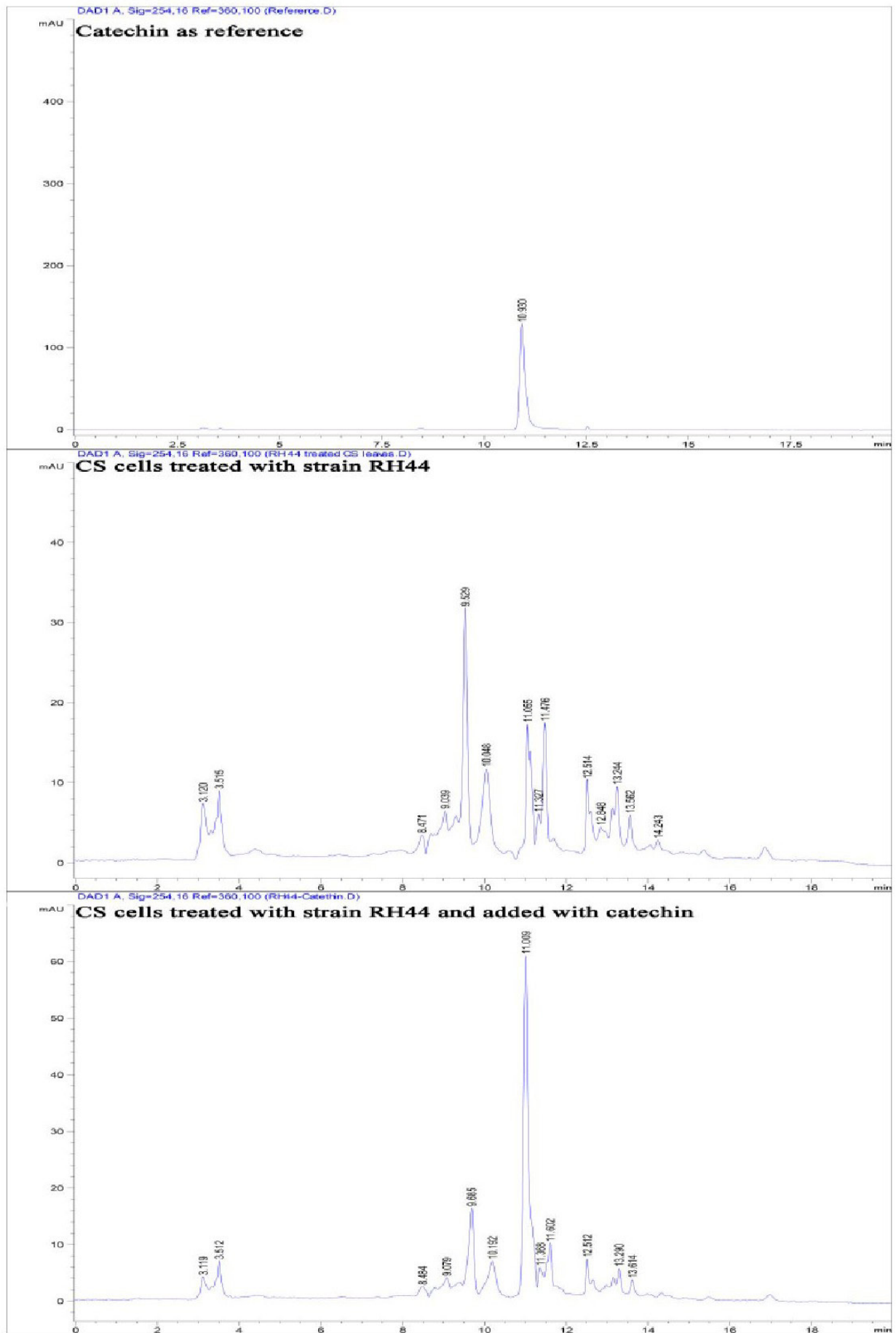
Supplementary Fig. 2: Chromatograms of RH grape cell extracts after co-culture with different endophytic fungal strains.



Supplementary Fig. 3: Clustering of replicates of CS treatments based on the presence/absence of detected metabolites by squared Euclidean distance hierarchical clustering using SPSS 16.0 software.



Supplementary Fig. 4: Clustering of replicates of RH treatments based on the presence/absence of detected metabolites by squared Euclidean distance hierarchical clustering using SPSS 16.0 software.



Supplementary Fig. 5: Results of a preliminary experiment for evaluating the presence of catechin in CS cells treated with strain RH44.

Supplementary Table 1

Acetonitrile-water gradient for methanol extracts of grape cell separation and analysis on reversed-phase HPLC

Time (min)	Flow (mL·min <sup>-1</sup> )	% ACN	% Water (mixed with methanol)
0	1	95	5
2	1	90	10
5	1	80	20
8	1	70	30
15	1	60	40
20	1	95	5

Supplementary Table 2

HPLC detected metabolites and contents of CS grape cells (mg·g<sup>-1</sup>)

M	T															
	Control	RH7	RH12	RH32	RH34	RH36	RH44	RH47	RH48	RH49	MDR1	MDR3	MDR4	MDR33	MDR36	
M1	1.88	1.75	-	1.68	1.06	1.42	0.71	1.11	1.82	0.95	-	-	1.80	-	-	
M2	-	-	2.59	-	5.94	-	1.26	1.45	-	3.33	2.55	1.56	1.28	1.07	5.55	
M3	0.79	-	4.25	9.22	5.88	4.86	1.71	2.04	1.47	3.35	3.91	1.38	1.92	1.93	9.01	
M4	1.21	0.6	0.97	3.17	1.55	1.13	1.26	1.56	1.92	1.31	1.12	0.99	1.80	0.88	1.87	
M5	-	-	1.26	0.95	0.47	1.15	1.97	1.59	-	2.46	0.86	1.49	-	3.27	7.17	
M6	-	-	-	-	0.86	-	-	-	-	-	-	-	-	-	-	
M7	0.42	1.26	16.68	10.17	13.92	10.94	4.33	16.45	0.71	11.92	14.99	24.15	16.99	11.78	5.49	
M8	0.83	-	1.33	0.70	0.75	1.13	-	0.93	0.59	1.18	1.73	1.65	-	0.66	1.99	
M9	-	0.66	4.04	0.39	-	-	-	-	-	-	2.78	2.06	1.34	3.48	5.57	
M10	0.36	-	-	1.00	1.74	1.88	-	1.72	-	1.65	-	-	-	-	-	
M11	1.07	-	-	0.95	-	-	-	-	-	1.75	-	-	3.15	-	-	
M12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
M13	7.32	0.58	-	6.62	8.42	6.85	-	-	7.68	13.56	-	-	1.09	1.88	-	
M14	13.23	7.01	1.66	16.42	17.16	10.04	4.58	1.59	12.61	13.32	9.23	0.92	1.13	6.51	30.40	
M15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
M16	-	12.15	-	4.19	10.98	5.62	4.76	8.25	-	6.52	7.58	-	-	2.40	19.15	
M17	-	-	0.51	5.47	6.23	-	0.92	-	-	-	1.83	-	8.47	0.54	5.40	
M18	1.29	-	-	-	-	1.41	-	4.49	-	-	-	-	0.99	0.62	0.83	
M19	-	-	-	-	-	-	-	-	0.98	2.33	-	-	-	-	0.68	
M20	-	-	8.33	-	-	-	-	-	0.63	-	7.27	9.56	5.15	5.41	1.50	
M21	2.06	2.3	0.28	0.55	1.65	3.08	2.09	0.69	0.27	2.29	0.48	0.41	0.62	0.96	0.38	
M22	-	-	0.27	0.75	-	-	-	-	2.00	-	-	-	-	-	1.47	
M23	-	-	0.44	0.63	-	-	-	-	-	-	-	-	-	-	-	
M24	0.45	0.96	1.49	-	-	0.60	-	-	0.86	-	3.42	0.46	1.51	2.99	3.49	
M25	0.76	0.71	0.59	0.42	1.10	0.42	0.78	0.86	0.56	0.73	0.68	1.25	1.11	1.06	1.05	
M26	-	-	0.73	-	-	-	-	-	-	-	0.87	0.28	0.63	1.02	0.68	
M27	1.21	-	-	1.13	-	-	3.21	-	-	-	1.06	-	1.43	0.61	-	
M28	-	-	3.85	-	-	-	-	-	-	-	-	6.42	-	1.02	1.11	

