

Linear Discriminant Analysis

Table S7a: LDA analysis of bacterial genus according to the site

The table below shows at most 500 features ranked by their p values, with significant features highlighted in orange.

Name	Pvalues	FDR	Remote	Urban	LDAscore	View
g__Pontibacter	5.4399E-4	0.0272	154040.0	2404.2	4.88	Details
g__Romboutsia	0.0015463	0.038657	4155.0	156.51	3.3	Details
g__Clostridium_sensu_stricto_1	0.0083345	0.13891	3184.5	161.63	3.18	Details
g__Turicibacter	0.012891	0.14921	3107.1	96.699	3.18	Details
Not_Assigned	0.016703	0.14921	4050600.0	7380400.0	-6.22	Details
g__Acidovorax	0.017605	0.14921	360830.0	75175.0	5.15	Details
g__Noviherbaspirillum	0.027538	0.17808	4690.8	161.14	3.35	Details
g__Rhizobacter	0.028493	0.17808	49717.0	6918.3	4.33	Details
g__Salinimicrobium	0.033952	0.18089	26357.0	205.57	4.15	Details
g__Ramlibacter	0.036173	0.18089	5649.7	245.49	3.45	Details
g__Brevundimonas	0.044083	0.20038	1990000.0	629540.0	5.63	Details
g__Parvibaculum	0.074091	0.27571	77982.0	6454.5	4.54	Details
g__Cavicella	0.082151	0.27571	126880.0	14684.0	4.75	Details
n__Arntibacter	0.087376	0.27571	14767.0	23847.0	-3.66	Details

Table S7b: LDA analysis of bacterial genus according to the season

The table below shows of most 500 features ranked by their p-values, with significant features highlighted in orange.

Name	Pvalue	FDR	Spring	Summer	Winter	LDA score	View
g__Novosphingobium	3.4787E-4	0.0044121	0.0	10081.0	280740.0	5.17	Details
g__Candida	4.6270E-4	0.0044121	0.0	4002.2	203830.0	5.1	Details
g__Sphingomonas	5.2094E-4	0.0044121	601.83	83245.0	884000.0	5.05	Details
g__Micrococcus	5.5094E-4	0.0044121	0.0	5029.9	278.85	3.47	Details
g__uncultured	7.4348E-4	0.0044121	0.0	4158.9	13378.0	4.87	Details
g__Diphylococcus	8.2809E-4	0.0044121	142.8	37577.0	178.58	4.27	Details
g__Marella	8.0013E-3	0.0044121	121980.0	472700.0	888.8	5.27	Details
g__Sphingobium	9.0010E-9	0.0044121	85.383	1798.2	1822900.0	5.82	Details
g__Aeromicrobium	9.0010E-1	0.0044121	3071.9	279.59	0.0	3.0	Details
g__Helomonas	9.0010E-4	0.0044121	2484.3	32280.0	1981.2	5.2	Details
g__Sphingopsis	9.0011E-3	0.0044121	538.85	982740.0	310000.0	5.45	Details
g__Erythrobacter	9.0012E-9	0.0044121	182.32	179120.0	887.21	4.68	Details
g__Achromobacter	9.0012E-9	0.0044121	180.84	80617.0	59745.0	4.68	Details
g__Shewanella	9.0013E-4	0.0044121	682.95	159400.0	220.15	4.69	Details
g__Hydrocarboniferibacter	9.0013E-3	0.0044121	130.79	888.7	5022.0	4.61	Details
g__Pseudocanthomonas	9.0014E-1	0.0044121	40.59	8926.1	204880.0	5.17	Details
g__Piscobacter	9.0019E-6	0.0046579	181.09	3249.1	99820.0	4.7	Details
g__Tetrasphaera	9.0021E-4	0.0050284	288.84	40038.0	358.37	3.61	Details
g__Cultobacterium	9.0023E-2	0.0000870	0.0	18307.0	300.48	3.06	Details
g__Pseudethnobacter	9.0024E-2	0.0061954	20911.0	18290.0	527.04	4.11	Details
g__Bryophyllum	9.0011E-9	0.0070223	268.61	5738.8	14204.0	3.84	Details
g__Morpho	9.0041E-4	0.0095781	32968.0	24100.0	200.07	4.21	Details
g__Acetivora	9.0043E-6	0.010467	473.66	47217.0	738870.0	5.57	Details
g__Paracoccus	9.0090E-1	0.010467	2919.0	6632.1	0.0	3.62	Details
g__Pantoea	9.0092E-4	0.010881	3473.0	21390.6	103900.0	4.7	Details
g__Variovorax	9.0095E-9	0.012614	124.0	14423.0	57724.0	4.45	Details
g__Altimonasium_haerzfeldii	9.0010E-2	0.01518	224990.0	200020.0	18281.0	5.01	Details
g__Methylobacterium	9.0101E-1	0.018181	427.81	21900.0	180.22	4.04	Details
g__Skermanella	9.0195E-6	0.024171	1033.1	3110.1	0.0	3.19	Details
g__Halobacterium	9.0222E-7	0.027045	9493.0	8832.7	0.0	3.07	Details
tax__cognate	9.0235E-3	0.027589	7792180.0	5940000.0	4084000.0	6.25	Details
g__Delfia	9.0302E-5	0.047898	85.388	9022.8	154850.0	4.89	Details
g__Pseudomonas	9.0333E-2	0.050904	52930.0	309200.0	442940.0	5.20	Details
g__Romboutkella	9.0381E-3	0.059103	1891.7	141.11	5219.5	3.4	Details
g__Stenochryseobacterium	9.0460E-4	0.058734	580.78	2478.2	175.89	3.23	Details
g__Nitrospira	9.0584E-7	0.07027	10303.7	5878.8	295.07	3.52	Details
g__Blastococcus	9.0618E-5	0.083703	880.11	1150.8	170.85	2.7	Details
g__Bellinobacterium	9.0738E-9	0.087314	30944.0	820.70	0.0	4.25	Details
g__Nimrodobacterium	9.0840E-3	0.10781	4880.0	1605.4	0.0	3.35	Details
g__Dasyatis	9.0918E-3	0.11422	24825.0	11990.0	85040.0	4.48	Details

Table 7c: LDA analysis of bacterial genus according to the stage

The table below shows at most 500 features ranked by their p values, with significant features highlighted in orange.

Name	Pvalues	FDR	1	2	3	4	5	LDA score	View
denovo20023	0.099973	0.00031	7191.9	0.0	9209.4	0.0	31263	2.66	Details
denovo2056	0.14558	0.00031	2008.3	5629.4	956.11	2210.6	2503.4	3.37	Details
denovo28732	0.1064	0.00031	2049.0	2024.0	502.74	2348.2	302.21	3.11	Details
denovo27093	0.19013	0.00031	10167.0	40746.0	5015.9	12853.0	3337.9	4.27	Details
denovo7813	0.18864	0.00031	539.75	1385.1	1402.6	36297.0	2342.8	4.26	Details
denovo18480	0.10329	0.00031	0.0	57507.0	10320.0	5285.8	38108.0	4.96	Details
denovo22017	0.21466	0.00031	0.0	7254.2	0.0	6951.4	11101.0	2.74	Details
denovo18947	0.21939	0.00031	525.92	346.55	2187.5	856.34	804.31	2.96	Details
denovo13631	0.22771	0.00031	5000.0	893.78	75.844	906.92	2160.0	3.39	Details
denovo24124	0.2291	0.00031	2642.3	4626.4	13450.0	64842.0	5985.4	4.49	Details
denovo123	0.25136	0.00031	1779.5	305.17	335.21	732.46	892.44	2.87	Details
denovo9511	0.25476	0.00031	36845.0	1726.9	4269.4	0.0	637.05	4.27	Details
denovo4958	0.25945	0.00031	1436.0	1701.1	1290.5	2280.4	358.84	2.96	Details
denovo3890	0.27502	0.00031	4826.2	999.44	15220.0	4501.9	15942.0	3.87	Details
denovo27114	0.28113	0.00031	4349.3	7886.0	4761.0	5233.8	23137.0	3.97	Details
denovo31045	0.28676	0.00031	6145.7	5667.2	2789.7	4551.9	1395.6	3.38	Details
denovo9207	0.29528	0.00031	1342.6	1636.8	1264.7	699.89	827.33	2.80	Details
denovo23495	0.29543	0.00031	1607.3	554.72	4262.5	1475.0	1031.4	3.27	Details
denovo8574	0.30623	0.00031	640.01	119.52	1517.7	1223.0	454.54	2.65	Details
denovo21341	0.30825	0.00031	15515.0	460.07	31809.0	35927.0	47021.0	4.57	Details

Table 7d: LDA analysis of fungal genus according to the site

The table below shows at most 500 features ranked by their p values, with significant features highlighted in orange.

Name	Pvalues	FDR	Remote	Urban	LDA score	View
g_Meyerozyma	0.0033641	0.21194	1355.0	25517.0	4.08	Details
g_Trichoderma	0.014795	0.41881	7476.5	29273.0	4.04	Details
g_Gibberella	0.022311	0.41881	32626.0	21488.0	-3.75	Details
g_Pseudallescheria	0.028591	0.41881	9884.7	1027.3	-3.65	Details
g_Alternaria	0.04125	0.4443	1096000.0	625170.0	-5.37	Details
g_Lewia	0.044348	0.4443	6722.0	2222.7	-3.35	Details
g_Penicillium	0.049366	0.4443	34232.0	193010.0	4.9	Details
g_Malassezia	0.069223	0.4875	31936.0	63611.0	4.2	Details
g_Mucor	0.069642	0.4875	46024.0	101250.0	4.44	Details
g_Scoodosporium	0.084767	0.53403	41126.0	9310.6	-4.2	Details
g_Meira	0.11193	0.57755	419.62	2878.4	3.09	Details
g_Gymnascella	0.11193	0.57755	7349.1	688.23	-3.52	Details
g_Myrothecium	0.13512	0.57755	15709.0	7348.6	-3.62	Details
g_Exophiala	0.13897	0.57755	35724.0	33986.0	-2.04	Details
g_unidentified	0.15093	0.57755	2419000.0	1358800.0	-5.72	Details
g_Walleimia	0.15585	0.57755	6005.1	1382.1	-3.36	Details
g_Rhodotorula	0.15585	0.57755	83378.0	742.44	-4.62	Details
g_Erysiphe	0.19852	0.65908	2817.7	3304.2	2.39	Details
Nnt_Assigned	0.19878	0.65908	2713200.0	3651200.0	5.67	Details

Table S7e: LDA analysis of fungal genus according to the season

The table below shows at most 500 features ranked by their p values, with significant features highlighted in orange.

Name	Pvalues	FDR	Spring	Summer	Winter	LDAscore	View
g_Gloeotinia	0.001995	0.12568	39.89	11733.0	493900.0	5.39	Details
g_Fomitopsis	0.019938	0.30911	1448.9	204.75	77758.0	4.59	Details
g_Mortierella	0.021994	0.30911	153930.0	0.0	72.249	4.89	Details
g_Blumeria	0.023584	0.30911	35182.0	162.54	0.0	4.25	Details
g_Chaetomium	0.024533	0.30911	17383.0	12099.0	58882.0	4.37	Details
g_Besuveria	0.04735	0.49717	22123.0	51171.0	11788.0	4.29	Details
g_Ustilago	0.064598	0.55144	3489.9	310.45	0.0	3.24	Details
g_Exophiala	0.070025	0.55144	23410.0	66996.0	8169.4	4.47	Details
g_Scopulariopsis	0.11401	0.72661	1077.8	0.0	934.57	2.73	Details
g_Eurotium	0.12305	0.72661	39733.0	31402.0	113250.0	4.61	Details
g_Lecanicillium	0.12756	0.72661	7863.1	17833.0	18480.0	3.73	Details
g_Stachybotrys	0.1478	0.72661	5245.2	914.31	4983.8	3.34	Details
g_Cochliobolus	0.16421	0.72661	28852.0	43930.0	94745.0	4.52	Details
g_Aureobasidium	0.17237	0.72661	76667.0	35998.0	46010.0	4.31	Details
g_Botryotinia	0.173	0.72661	20892.0	3595.7	5249.8	3.94	Details
g_Coprinellus	0.18701	0.73636	2620.1	40.636	505.74	3.11	Details
g_Cladosporium	0.21813	0.78219	285040.0	186710.0	452920.0	5.12	Details
g_Pseudallescheria	0.23574	0.78219	2958.7	1116.0	15488.0	3.86	Details
g_Cryptococcus	0.24545	0.78219	1218900.0	1254200.0	1161800.0	4.66	Details

Table S7f: LDA analysis of fungal genus according to the stage

The table below shows at most 500 features ranked by their p values, with significant features highlighted in orange.

Name	Pvalues	FDR	1	2	3	4	5	7	View
g_Gladorrhinum	0.02582	0.55038	837.32	0.0	0.0	32442.0	0.0	4.21	Details
g_Aureobasidium	0.041962	0.55038	99423.0	15672.0	55025.0	56744.0	9946.5	4.65	Details
g_Cercospora	0.045577	0.55038	0.0	116530.0	0.0	0.0	11143.0	4.77	Details
g_Besuveria	0.060552	0.55038	11627.0	65875.0	34899.0	16015.0	46920.0	4.5	Details
g_Candida	0.088018	0.55038	163850.0	479090.0	175530.0	788550.0	38081.0	5.59	Details
g_Setosphaeria	0.088309	0.55038	1098.2	38735.0	6892.5	22841.0	56750.0	4.44	Details
g_Pyrenophora	0.092833	0.55038	3029.9	123.01	4289.8	0.0	0.0	3.92	Details
g_Cerrena	0.096673	0.55038	9922.2	48848.0	80243.0	2303.2	7400.0	4.6	Details
g_Coprinellus	0.0983	0.55038	3833.1	0.0	723.92	0.0	0.0	3.28	Details
g_Kodamaea	0.098683	0.55038	9402.9	6173.4	31416.0	9047.6	0.0	4.2	Details
g_Schizophyllum	0.1009	0.55038	94516.0	182010.0	545010.0	17525.0	33719.0	5.44	Details
g_Doratomyces	0.10483	0.55038	4067.7	32018.0	5251.4	25079.0	3786.0	4.19	Details
g_Alternaria	0.12504	0.56168	1256600.0	352250.0	769490.0	892410.0	515480.0	5.75	Details
g_Microascus	0.13512	0.56168	837.32	0.0	14938.0	9675.9	0.0	3.87	Details
g_Fusarium	0.1444	0.56168	231630.0	171260.0	51884.0	78716.0	92084.0	4.98	Details
g_Scopulariopsis	0.15391	0.56168	1217.7	0.0	1542.4	0.0	0.0	2.89	Details
g_Lewia	0.15716	0.56168	1691.3	5476.4	2682.4	4097.2	509.27	3.96	Details
g_Blumeria	0.16048	0.56168	4856.4	27241.0	0.0	25471.0	0.0	4.3	Details
g_unidentified	0.1836	0.60877	2273700.0	940860.0	1618600.0	1704500.0	1206100.0	6.25	Details
g_Chaetomium	0.19692	0.62028	22436.0	0.0	8263.5	11249.0	50037.0	4.7	Details