

Supplemental Table S4. Information on the top 25 of 97 hemizygous *Avr* candidates identified via DESeq2 differential gene expression analysis based on ONT cDNA transcript abundance quantified with bambu. Columns are listed in the following order: gene identifier, expression log₂ fold change in all *in planta* conditions (4 to 12 days post infection) relative to the dormant ungerminated urediniospores (UG) condition, full CDS lengths, and the associated functional annotations.

Full-length table is available on Zenodo (see Data Access in the manuscript).

gene_identifier	4dpi_lfc	6dpi_lfc	8dpi_lfc	10dpi_lfc	12dpi_lfc	cds_length	functional_annotation
Pst104E137_005603	7.848	11.679	10.614	8.794	7.764	456	SECRETED:SignalP(1-25);
Pst104E137_014999	8.855	10.227	10.280	9.884	9.160	252	SECRETED:SignalP(1-22),ingenannot:predicted_effector;
Pst104E137_019128	NULL	9.278	8.971	8.542	8.102	231	ingenannot:predicted_effector,SECRETED:SignalP(1-24);
Pst104E137_021272	8.288	10.188	10.093	8.509	8.147	1074	SECRETED:SignalP(1-25);
Pst104E137_029659	NULL	9.089	8.149	9.752	9.241	297	ingenannot:predicted_effector,SECRETED:SignalP(1-19);
Pst104E137_021690	8.113	9.954	10.598	10.319	9.442	1659	SECRETED:SignalP(1-24);
Pst104E137_021528	7.395	10.355	10.136	8.314	7.723	1041	SECRETED:SignalP(1-29);
Pst104E137_014762	8.924	8.180	8.684	7.802	7.717	330	SECRETED:SignalP(1-22),ingenannot:predicted_effector;
Pst104E137_024713	8.078	8.841	10.131	8.634	8.290	771	SECRETED:SignalP(1-19);
Pst104E137_005001	7.785	8.728	8.687	10.130	10.490	351	SECRETED:SignalP(1-27);
Pst104E137_021794	7.716	7.765	7.931	7.026	6.068	249	ingenannot:predicted_effector,SECRETED:SignalP(1-19);
Pst104E137_020506	7.450	8.026	8.548	7.605	7.873	249	SECRETED:SignalP(1-20);
Pst104E137_022562	NULL	7.579	7.065	5.755	5.506	219	SECRETED:SignalP(1-24);
Pst104E137_021402	8.782	6.283	9.273	7.916	9.344	585	SECRETED:SignalP(1-29);
Pst104E137_028795	6.317	8.722	8.386	6.644	6.023	624	SECRETED:SignalP(1-25);
Pst104E137_028801	6.273	8.626	8.401	6.522	6.010	624	SECRETED:SignalP(1-25);
Pst104E137_013184	NULL	7.446	7.539	6.960	6.618	1236	EggNog:ENOG503NU3V,SECRETED:SignalP(1-31),COG:G;Trehalose-phosphatase;
Pst104E137_010232	6.139	8.717	9.859	8.903	7.545	600	EggNog:ENOG503NUD5,COG:H,SECRETED:SignalP(1-19),ingenannot:predicted_effector;
Pst104E137_030210	NULL	7.322	7.590	7.849	7.588	486	SECRETED:SignalP(1-22);
Pst104E137_029664	NULL	7.279	7.412	6.320	5.985	348	SECRETED:SignalP(1-20);
Pst104E137_021280	6.257	8.108	8.453	7.043	6.332	1074	SECRETED:SignalP(1-25);
Pst104E137_024997	6.139	8.196	8.413	7.857	7.273	345	ingenannot:predicted_effector,SECRETED:SignalP(1-24);
Pst104E137_019245	NULL	7.159	7.080	6.858	6.596	183	SECRETED:SignalP(1-20);
Pst104E137_008987	NULL	7.138	7.372	6.153	5.207	249	SECRETED:SignalP(1-18),ingenannot:predicted_effector;
Pst104E137_018474	5.800	8.345	8.525	8.308	8.600	201	SECRETED:SignalP(1-18);