SUPPLEMENTARY MATERIAL

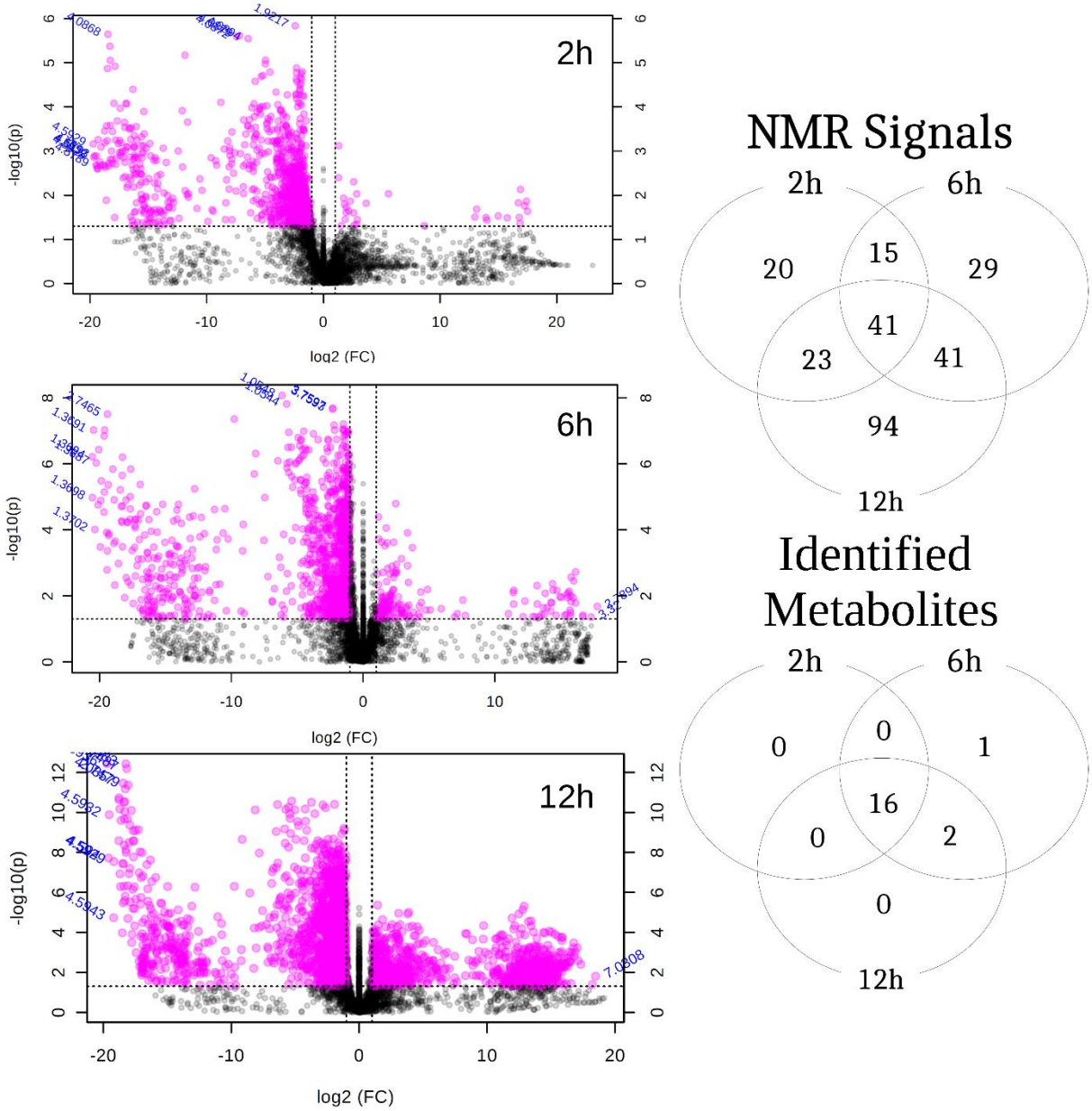

Figure S1. Volcano plot and Venn Diagram for highlighting important NMR signals. Time-specific volcano plot (left) for selecting NMR signals that attend the criteria of p-value, from Welch-Two Sample test, less than 5% and a fold change threshold of 2. The Venn diagram (right) shows an increasing number of important signals that are observed according to the progress of the infection process. Nevertheless, only three new metabolites (lactate, isoleucine, and leucine) are seen in 6h p.i. and 12h p.i.. The lactate pathway was only affected in the 6h p.i. cells.

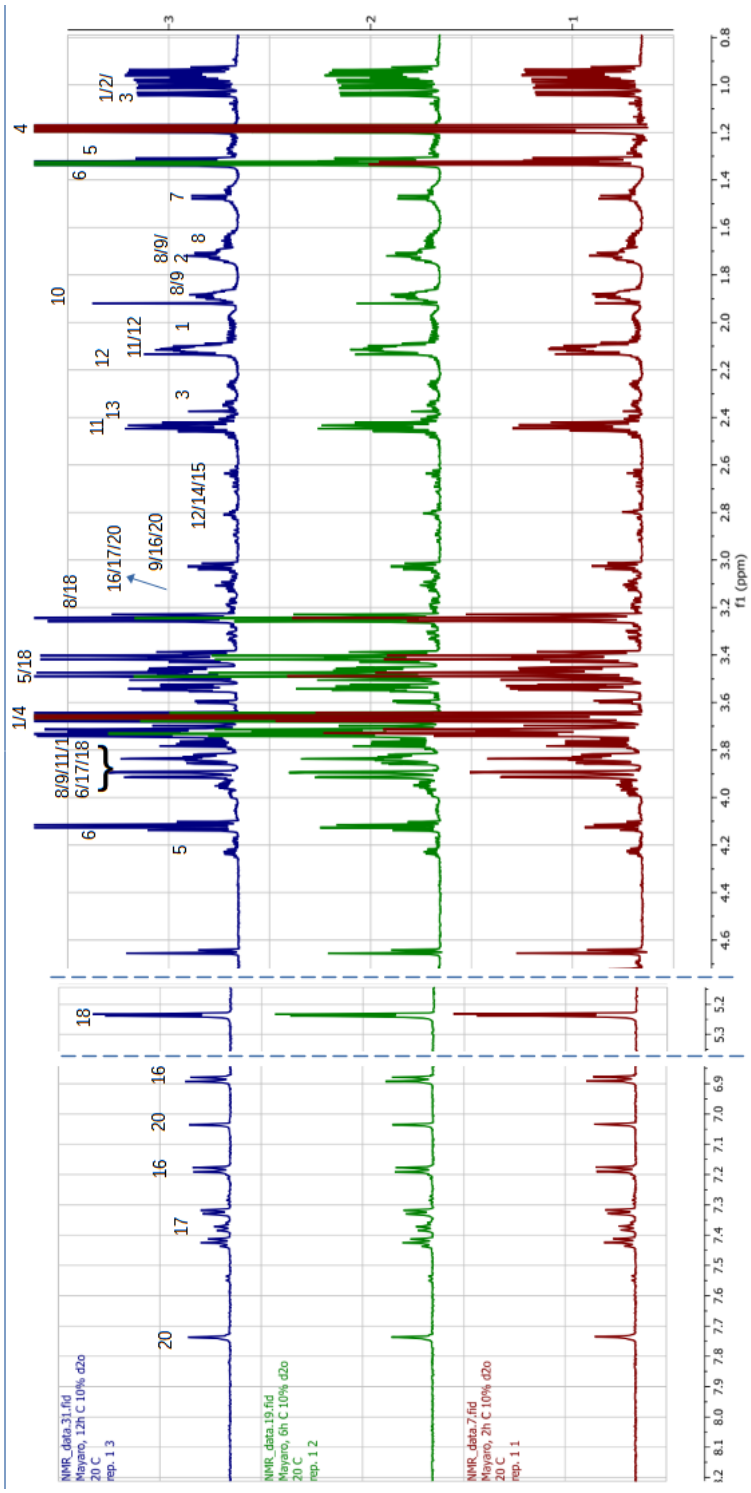

Figure S2. Reference NMR spectra from control subjects at 2 (brown), 6 (green), and 12 hour (blue) post infection. Metabolite identification followed the protocol mentioned in the main text. A total of 20 metabolites were identified as being relevant for the infection process: 1: Isoleucine, 2: Leucine, 3: Valine, 4: Ethanol, 5: Threonine, 6: Lactate, 7: Alanine, 8: Arginine, 9: Lysine, 1: Acetate, 11: Glutamine, 12: Methionine, 13: Pyruvate, 14: Aspartate, 15: Asparagine, 16: Tyrosine, 17: Phenylalanine, 18: Glucose, 19: Galactose, and 20: τ-Methylhistidine.

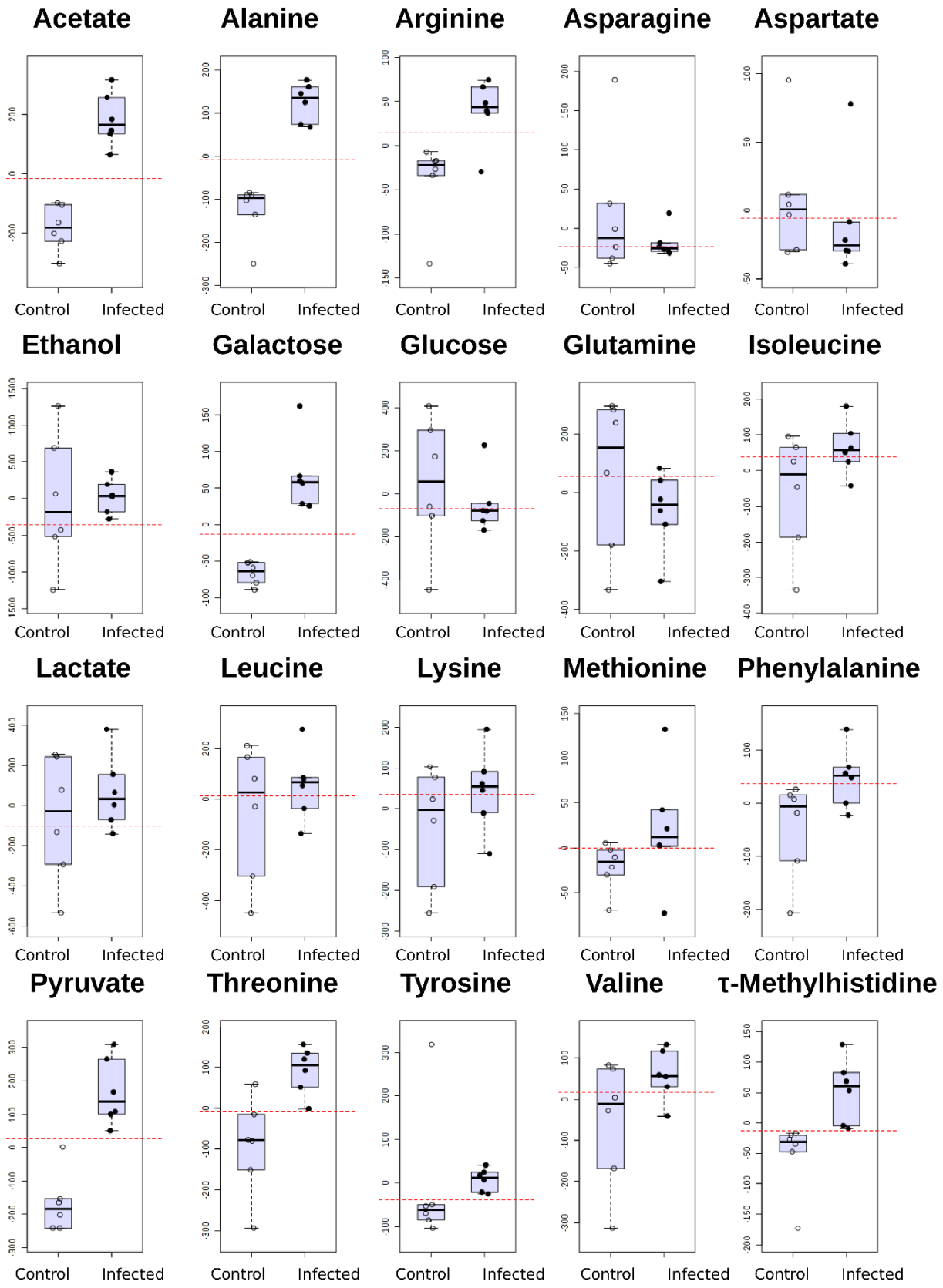

Figure S3. Boxplots indicating metabolites concentrations at 2 hpi.

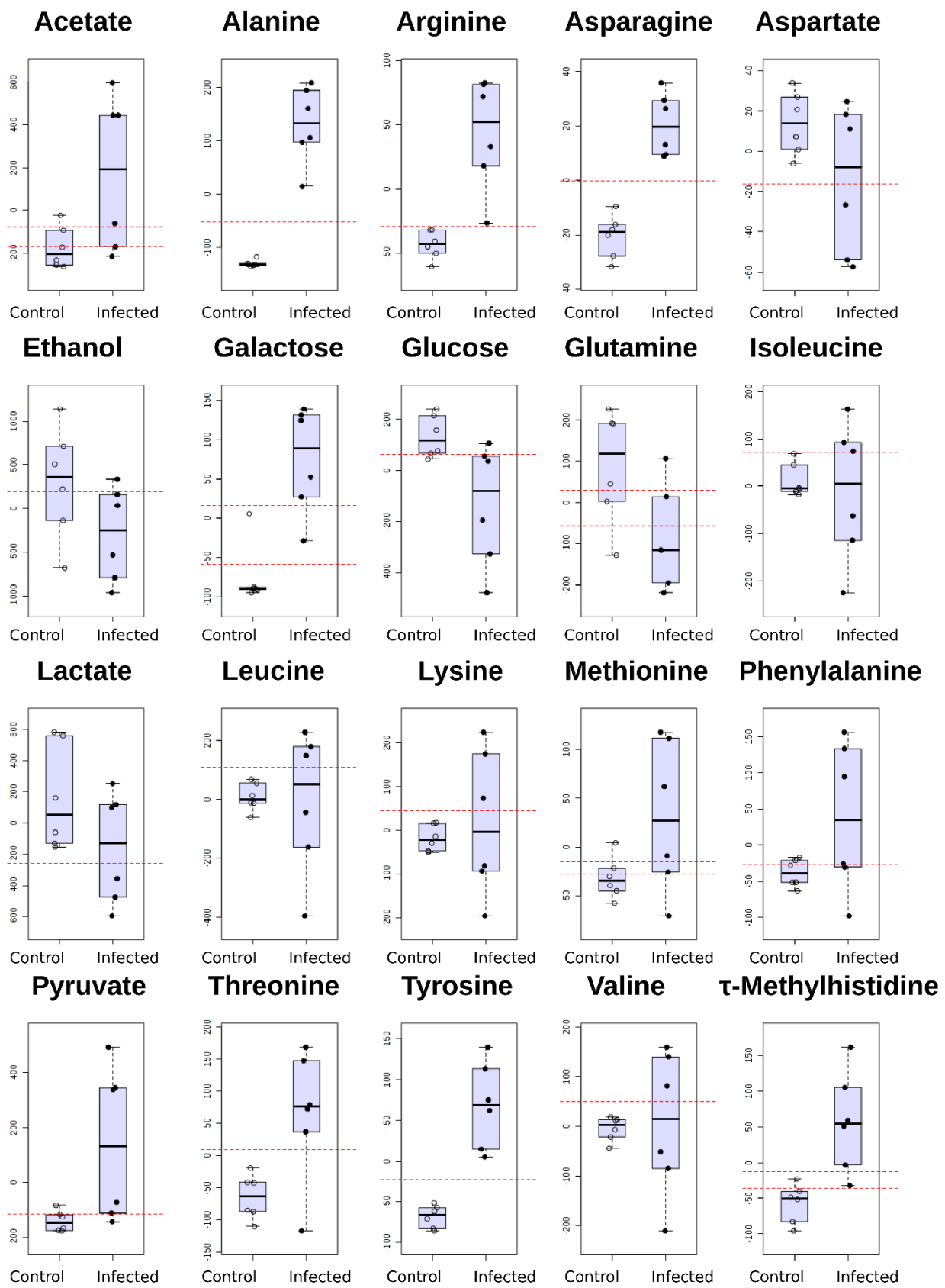

Figure S4. Boxplots indicating metabolites concentrations at 6 hpi.

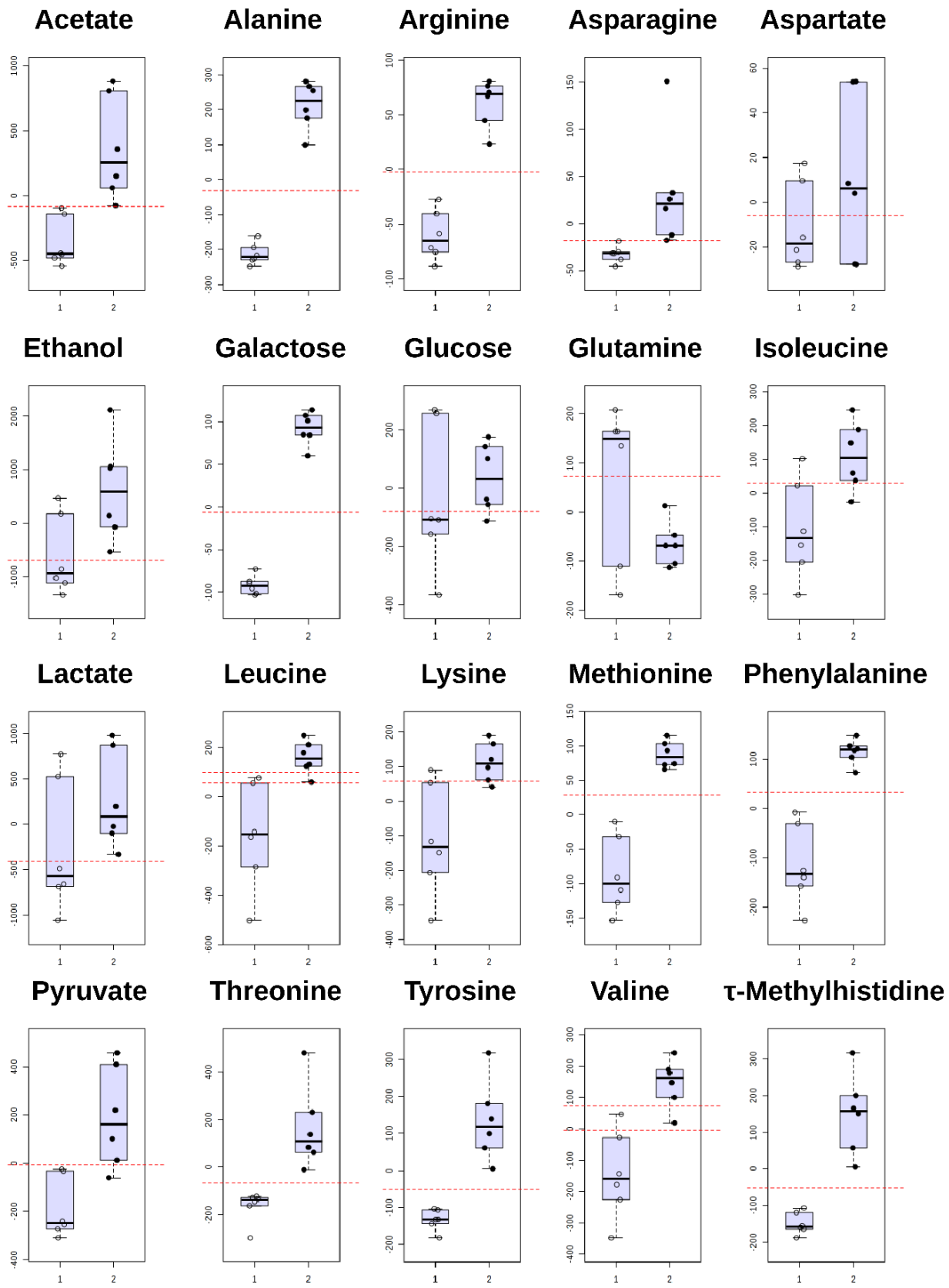

Figure S5. Boxplots indicating metabolites concentrations at 12 hpi.

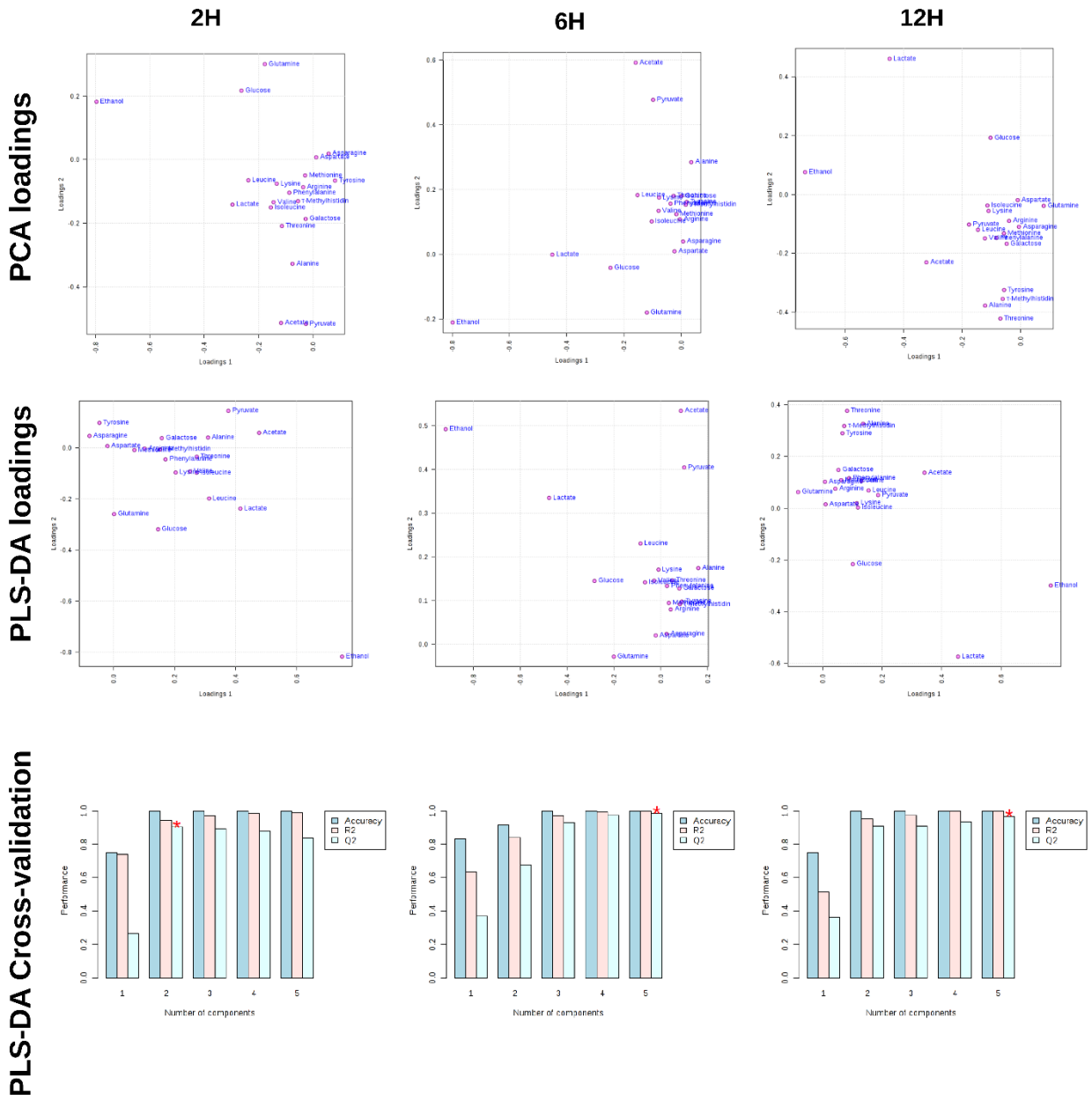

Figure S6. Loadings from PCA and PLS-DA for each time point. Metabolites with high values are Acetate, Glucose, Pyruvate, Glutamine, Ethanol, and Lactate for all time points. The bottom shows the PLS-DA performance in leave-one-out cross-validation for each time post-infection.

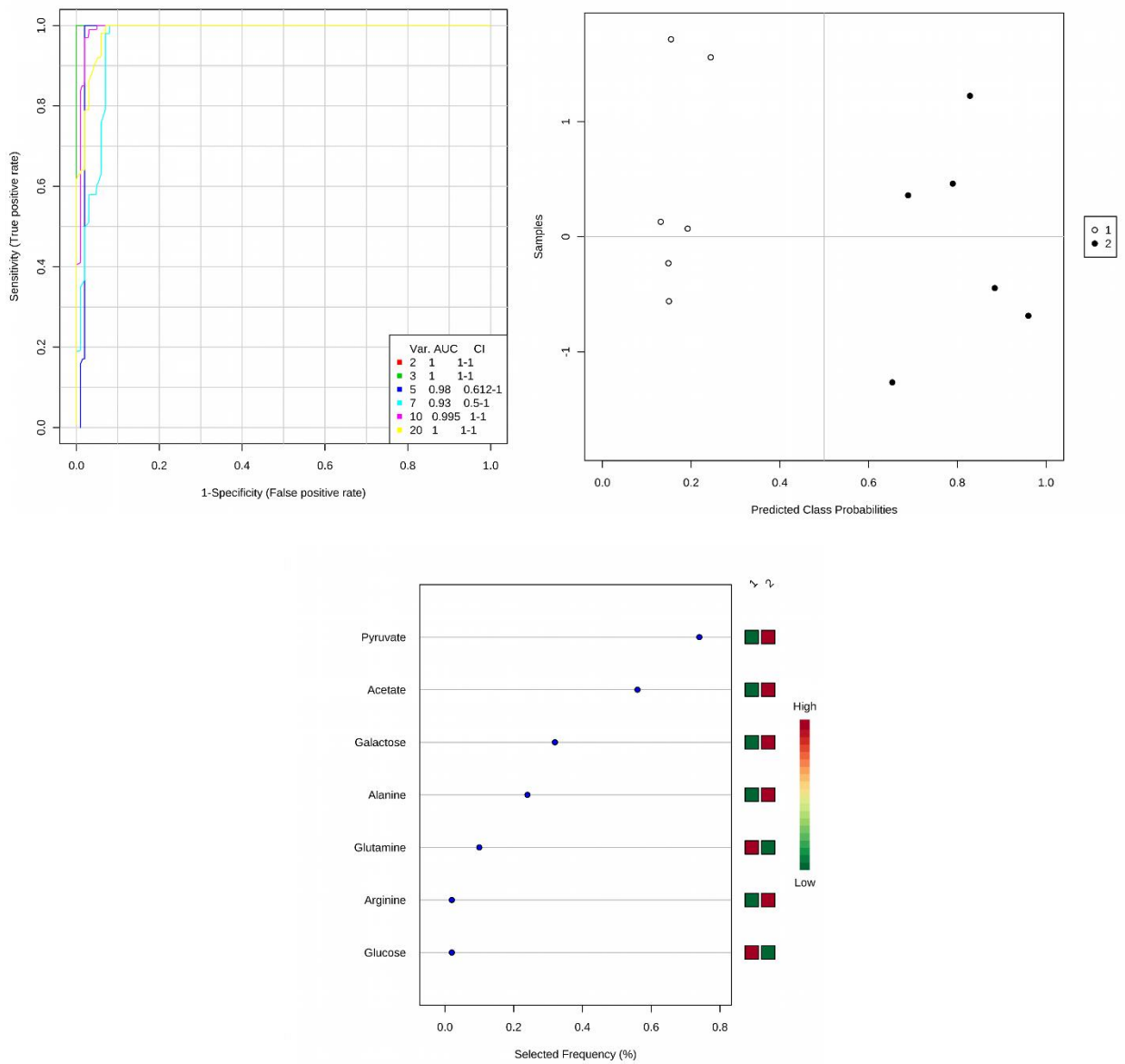

Figure S7. SVM classification of MAYV infected cells at 2 hpi.. Assessment of model quality through classification using SVM with its built-in variable selection approach and evaluation by means of area under the ROC curves. Classification performance is related to the robustness of the metabolites identified in the chemometric analysis in predicting a metabolic profile in control or infected cell.

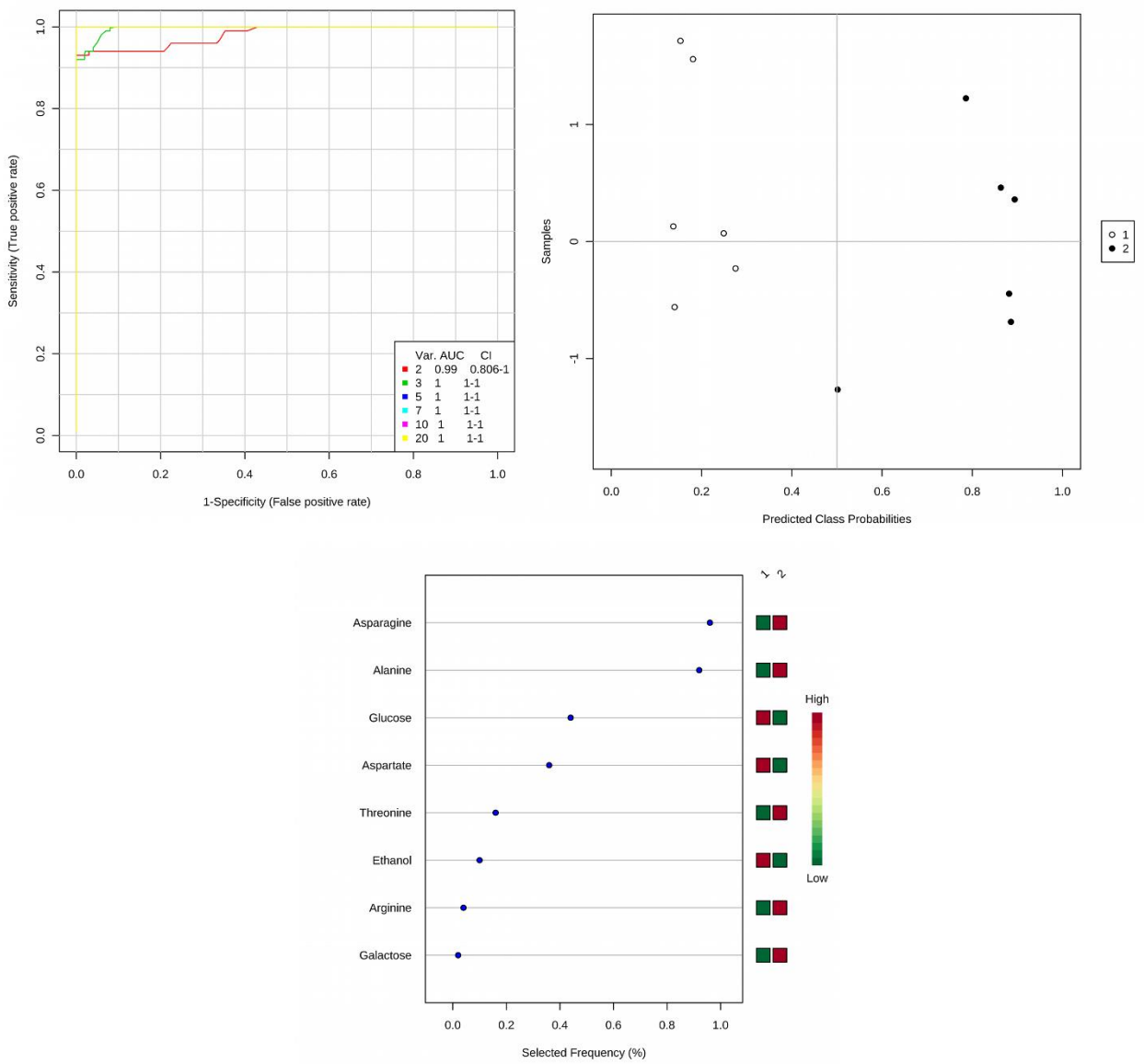

Figure S8. SVM classification of MAYV infected cells at 6 hpi.. Assessment of model quality through classification using SVM with its built-in variable selection approach and evaluation by means of area under the ROC curves. Classification performance is related to the robustness of the metabolites identified in the chemometric analysis in predicting a metabolic profile in control or infected cell.

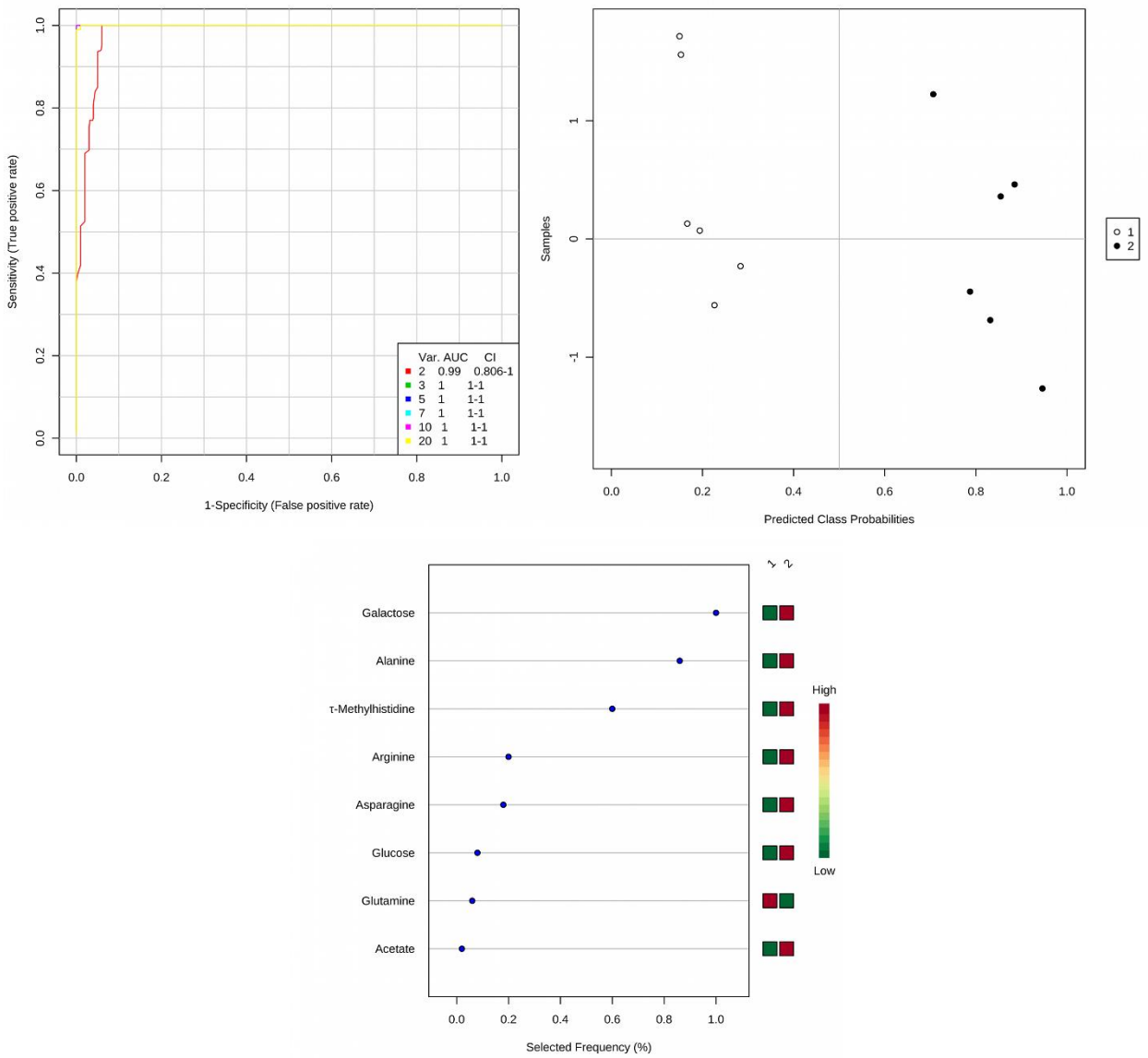

Figure S9. SVM classification of MAYV infected cells at 12 hpi. Assessment of model quality through classification using SVM with its built-in variable selection approach and evaluation by means of area under the ROC curves. Classification performance is related to the robustness of the metabolites identified in the chemometric analysis in predicting a metabolic profile in control or infected cell.