

Supplementary Figure 9 Predicted Cell wall values determined by PLSR model generated from FTIR Spectra vs reference mannan values extracted from cell wall isolated from dried ground leaf clippings obtained from *Cynodon* grasses including the  $R^2$  and RMSE for a calibration and validation set of samples. The calibration set (blue) was used to generate the model, while another independent validation set (red) was used to test its ability to predict unknown datasets. The  $R^2$  and RMSE obtained for the validation set measured the model's effectiveness for predicting unknown samples based on their FTIR spectra.