Supplementary Material

Non- destructive determination of shikimic acid concentration in transgenic maize exhibiting glyphosate tolerance using chlorophyll fluorescence and hyperspectral imaging

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**Supplementary Table 1.** Prediction results of the pre-processing models constructed by partial least-squares regression (PLSR) based on spectral information for shikimic acid concentration

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| --- | --- | --- | --- | --- | --- |
| Model type | Par[a] | Calibration set | | Prediction set | |
| *R*2 c | *RMSEC* | *R*2 p | *RMSEP* |
| MSC–PLSR | 7 | 0.73 | 15.24 | 0.73 | 15.09 |
| WT–PLSR | 9 | 0.81 | 14.74 | 0.82 | 6.78 |
| SG–PLSR | 8 | 0.73 | 14.10 | 0.76 | 14.66 |
| SNV–PLSR | 10 | 0.80 | 12.75 | 0.80 | 12.21 |

[a]Model parameters indicate the optimal number of latent variables for establishing the PLSR calibration model; *R*2 c and *R*2 p, coefficients of determination for calibration and prediction sets, respectively; *RMSEC* and *RMSEP*, root mean square errors of calibration and prediction sets, respectively; SNV, standard normal variate; SG, Savitzky-Golay smoothing; MSC, multiplicative scatter correction; WT, wavelet transformation