Supplementary material for the article:

Kolašinac, S.; Pećinar, I.; Danojević, D.; Ačić, S.; Dajić Stevanović, Z. Raman Spectroscopic-Based Chemometric Modeling Inassessment of Red Pepper Ripening Phases and Carotenoidsaccumulation. *Journal of Raman Spectroscopy* **2021**, 52 (9), 1598–1605. <https://doi.org/10.1002/jrs.6197>.

Supporting Information

Fig. S1. Loading plots: wavenumber in function of PC1, PC2, PC3 and PC4.

Fig. S2. PCA-LDA discrimination plots: A (training data) and B (test data) illustrate discrimination between green phase and other phases (green-brown, brown-red and deep red); C (training data) and D (test data) illustrate discrimination between green-brown and brown-red and deep red; E (training data) and F (test data) illustrate discrimination between brown-red and deep red phases. Discriminant scores (f1, f2, f3, f4, f34, and f234) determine the sample's membership in appropriate class.

Fig. S3. PLS-DA discrimination plots of training data. Values Y1, Y2, Y3 and Y4 represent predicted response.

Fig. S4. PLS-DA discrimination plots of test data. Values Y1, Y2, Y3 and Y4 represent predicted response.

Fig. S5. The results of SIMCA classification: A (training data) and B (test data) illustrate discrimination between green phase (class 1) and other phases (green-brown, brown-red and deep red); C (training data) and D (test data) illustrate discrimination between green-brown (class 2) and green, brown-red and deep red phases; E (training data) and F (test data) illustrate discrimination between brown-red (class 3) and green, green-brown and deep red phases; G (training data) and H (test data) illustrate discrimination between deep red (class 4) and green, green-brown and brown-red phases.