

Supplementary figures

Deep learning in hyperspectral image reconstruction from single RGB images – a case study on tomato quality quantification

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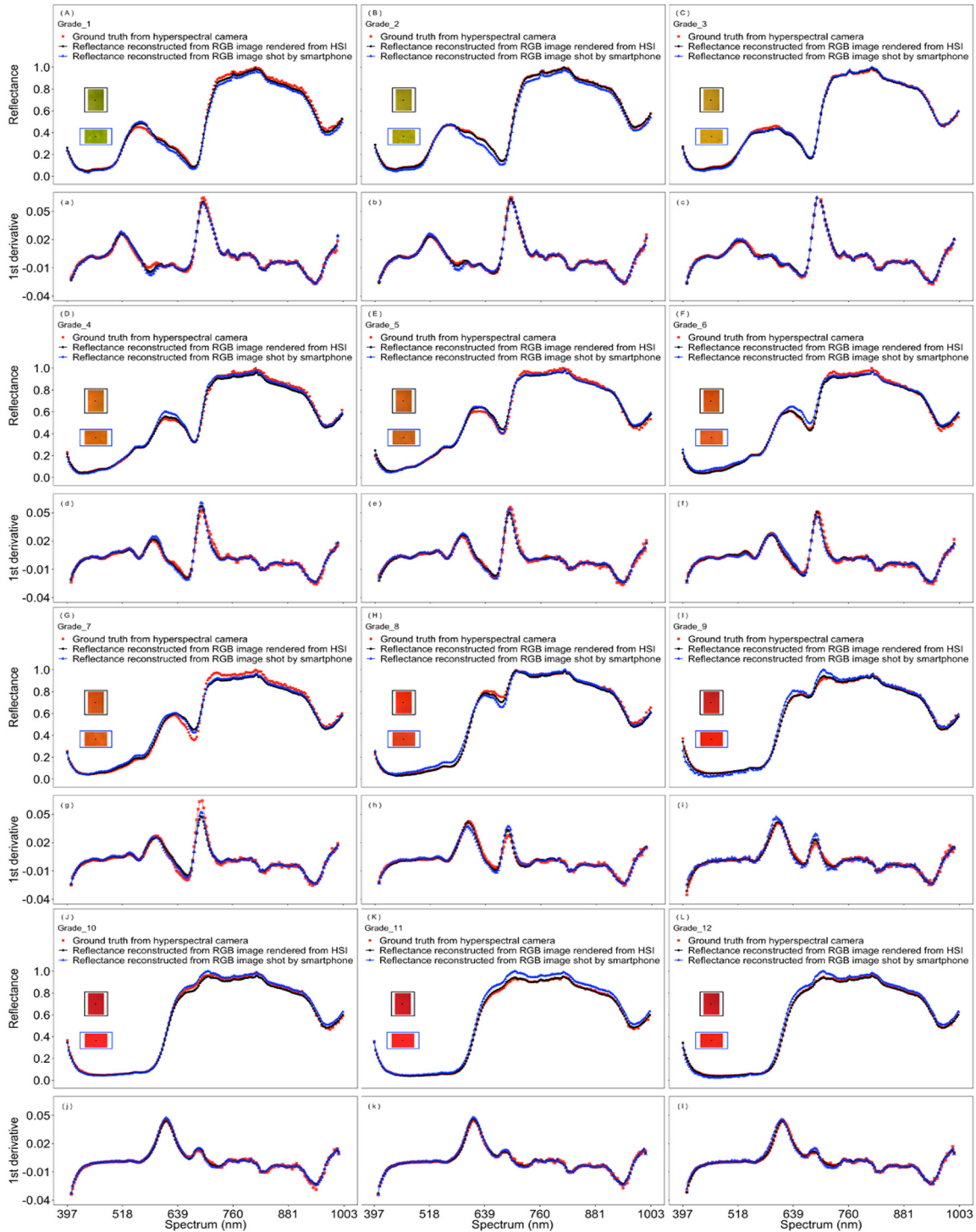


Figure S1. Reconstructed spectral reflectance (A-L) and their first derivatives (a-l) for tomato images in 12 grades based on color tile. The black dots at the centers of the red green blue (RGB) images were rendered from either hyperspectral images from a hyperspectral camera, Specim IQ, solid line with filled blue triangles, or from a smartphone camera, Samsung Galaxy S9+ smartphone, solid line with filled black circles. The red filled squares are corresponding ground truth spectral reflectance from original hyperspectral images.

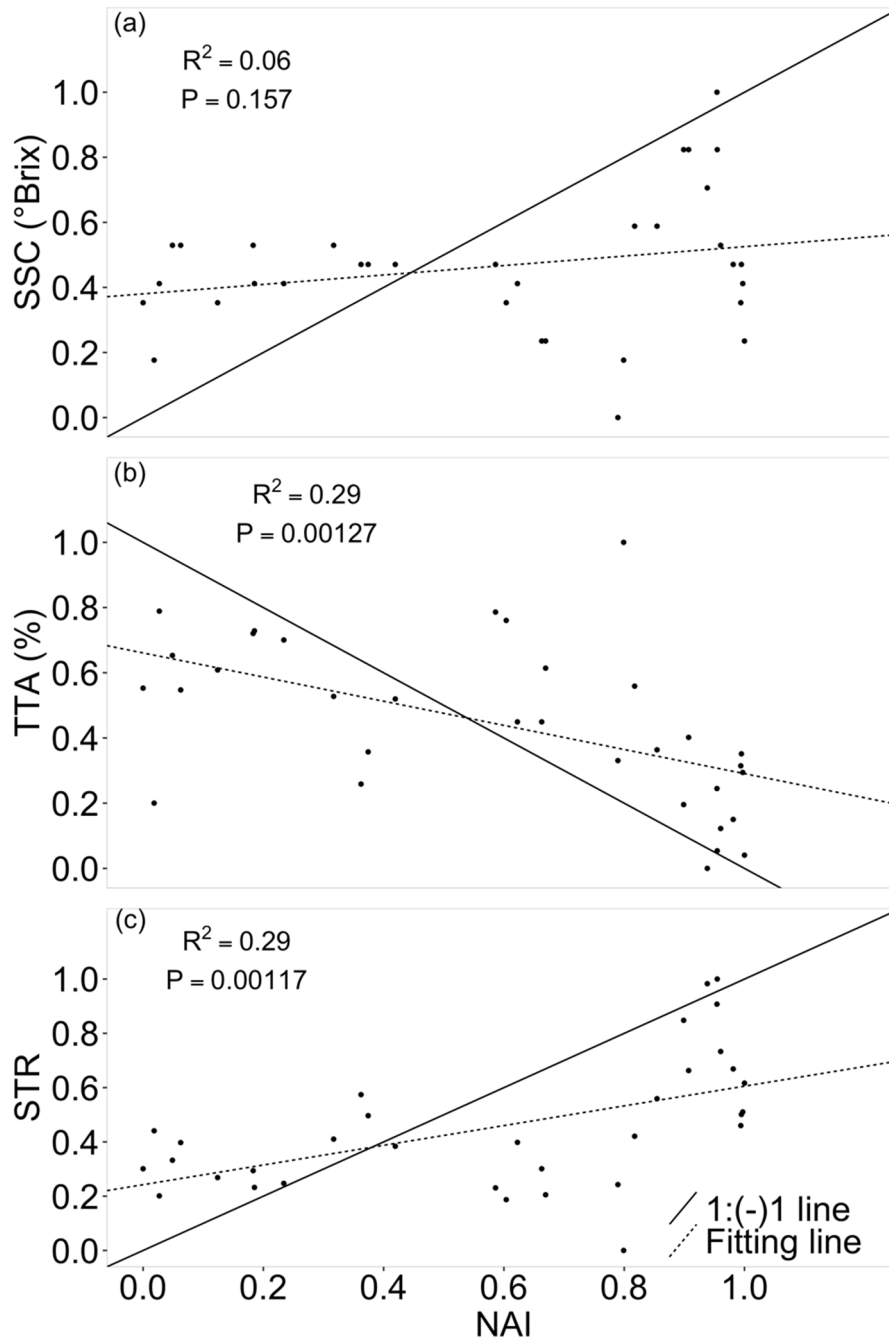


Figure S2. The correlations between normalized anthocyanin index (NAI) and (a) soluble solid content (SSC), (b) total titratable acid (TTA), (c) the ratio of SSC to TTA (STR) respectively. R^2 and corresponding P value from F test are also provided in each subplot