

Supplementary Information

A high-throughput phenotyping pipeline for quinoa (*Chenopodium quinoa*) panicles using image analysis with convolutional neural networks

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Supplementary Figure 1



Figure S1: Picture extraction for each experimental unit with blue background under field conditions.

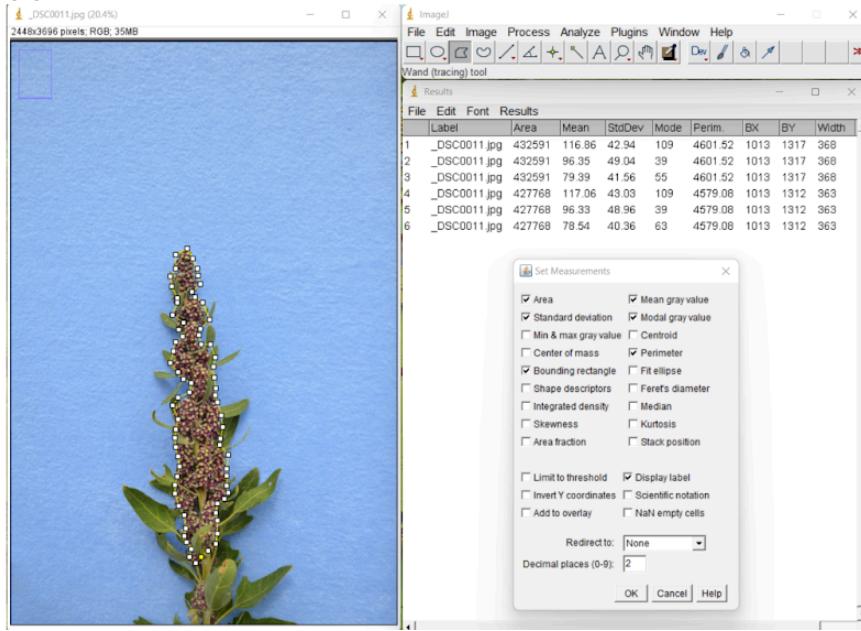
Supplementary Figure 2



Figure S2: Panicle image analysis. (a) Image from field condition with scale. (b) Image annotation is based on seven classes: panicle, scale, label, barcode, and each channel from RGB spectra

Supplementary Figure 3

(a) Parameters selection



(b) Image analysis

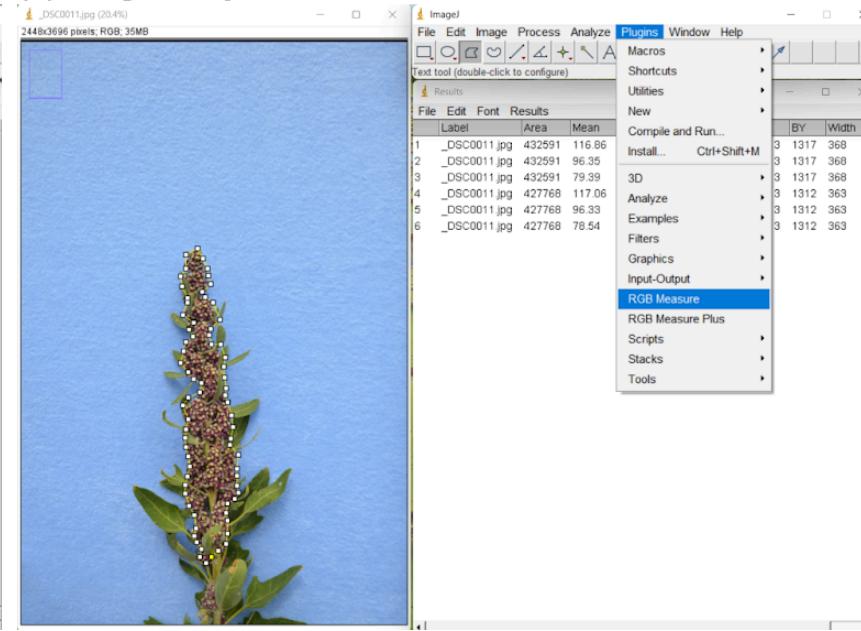


Figure S2: Manual feature extraction using ImageJ. (a) Selection of parameters, width, length, and area. (b) To extract RGB channel values, the RGB measure plugin was used.