

Supplementary Materials for article “Evaluation of the heterogeneity of wheat kernels as a traditional model object in connection with the asymmetry of development”

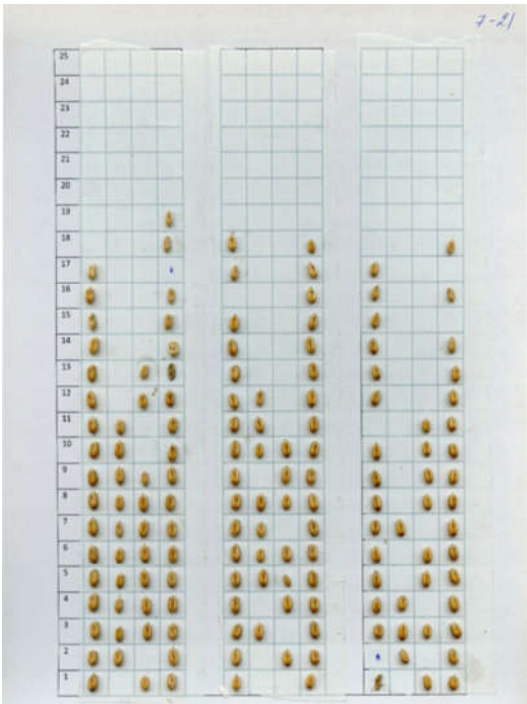


Figure S1. Kernels were fixed on a sheet for analysis, taking into account the location of the spikelets in the spike.

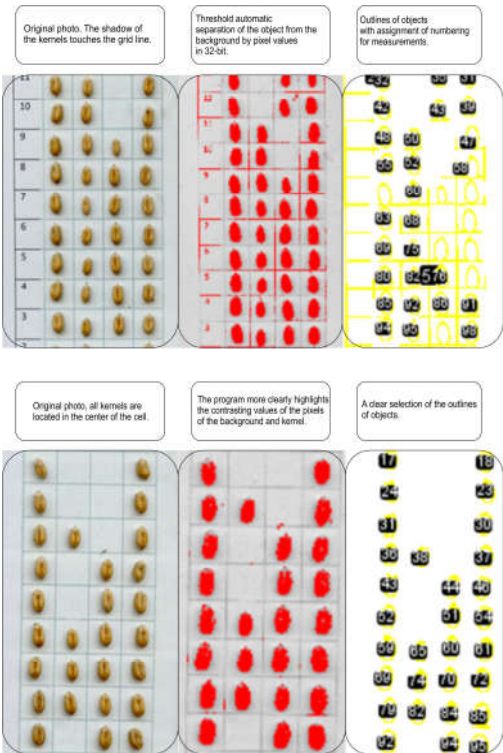


Figure S2. The sequence of analysis of kernel images in the program Image J.

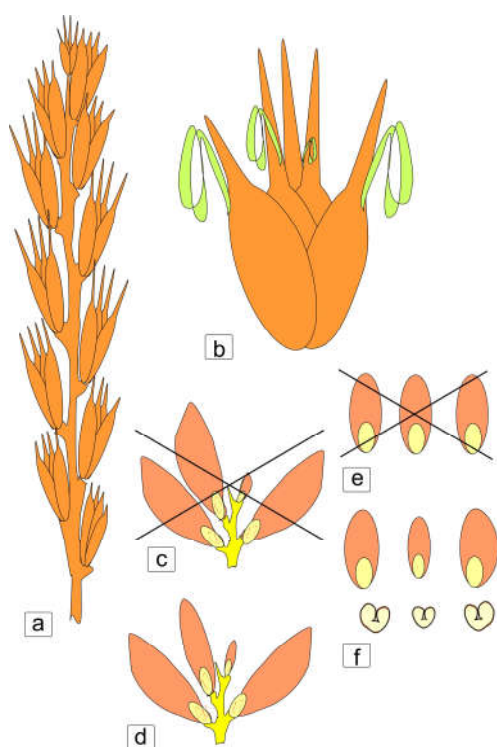


Figure S3. Scheme of a spike, spikelet and kernels of soft wheat of the Agata variety. Designations: a - mature spike; b - flowering spikelet; c - ideal representation, assuming uniform development of kernels; the proposed corrected kernel arrangement model; e - supposed ideal model of kernels of one spikelet; f - a corrected model of the real shape of kernels in spikelets, as well as sections of kernels, is proposed, taking into account their asymmetry.

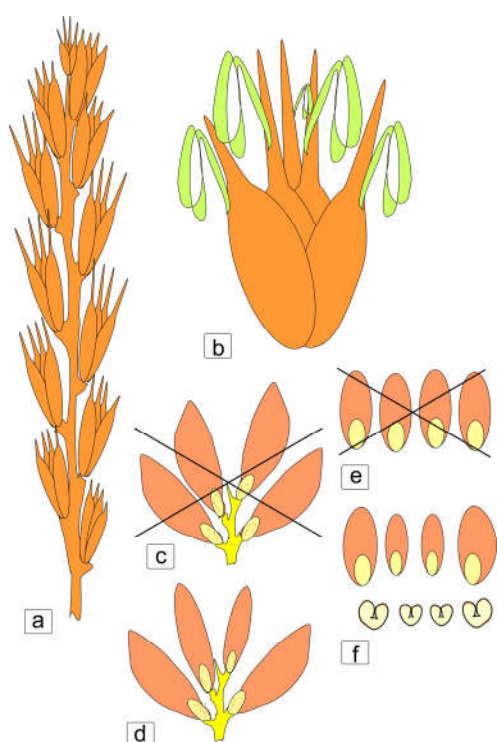


Figure S4. Scheme of a spike, spikelet and kernels of soft wheat of the Rubezhnaya variety. Designations: a - mature spike; b - flowering spikelet; c - ideal representation, assuming uniform development of kernels; d - proposed corrected kernel arrangement model; e - supposed ideal model of kernels of one spikelet; f - a corrected model of the real shape of kernels in spikelets, as well as sections of kernels, is proposed, taking into account their asymmetry.

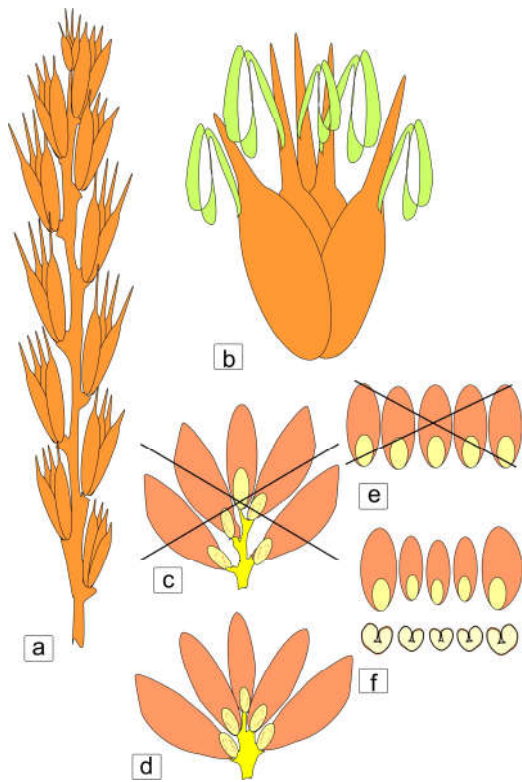


Figure S5. Scheme of a spike, spikelet and kernels of soft wheat of the Zlata variety. Designations: a - mature spike; b - flowering spikelet; c - ideal representation, assuming uniform development of kernels; the proposed corrected kernel arrangement model; e - supposed ideal model of kernels of one spikelet; f - a corrected model of the real shape of kernels in spikelets, as well as sections of kernels, is proposed, taking into account their asymmetry..

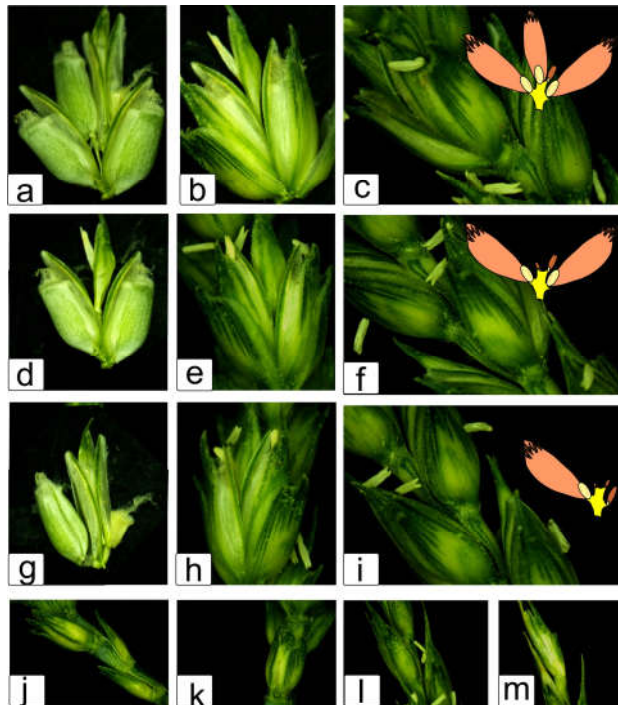


Figure S6. Features of the formation of the structure of spikelets and kernels, characteristic of different zones of the spike. Designation: kernels after setting (a, d, g); flowering spikelets (b,e,h); arrangement of spikelets on an spike (j,k,l,m).