

Supplementary figure legends

Fig. S1. Clusterization of metabolite profiles of anthers at the mature pollen stage from male fertile and male sterile potato genotypes. a) PCA loadings; b) LLE method ($k = 8$); c) PCA scores with ratio analysis; d) profiles represented in the space revealed with MDS.

Fig. S2. RF classification with ratios of metabolites concentrations. a) maximum MDA values; b) MDA ratios summing up.

Fig. S3. Meiosis in PMC of *S. tuberosum* – male fertile (cv. Lomonosovskij) and male sterile genotypes (cv. Sudarynja, cv. Gusar)

Fig. S4. Typical fluorescence spectra obtained from non-stained (a) and stained (b) with aniline blue pollen.