Supplementary Table 3. F-tests comparing whether an independent/common *K* and *C*W could be constrained within each cycle 1 and 2. Common *K*i within ad-1, de-2 and adsorption-2 is considered.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sorption cycle | Model | Comparison | F (df1, df2) | *P* |
| Oilseed rape | | | | |
| De- and adsorption 1  (common *K*i within each of de-1 and adsorption 1) | Common *C*W | Independent *K*, *C*W | 0.13 (1,46) | 0.72 |
| Common *K* | Independent *K*, *C*W | 0.03 (1,46) | 0.86 |
| Common *K*, *C*W (one line) | Independent *K*, common *C*W | 0.26 (1,47) | 0.61 |
| Common *K*, *C*W (one line) | Common *K*, independent *C*W | 0.37 (1,47) | 0.55 |
| De- and adsorption 2  (common *K*i within each of de-2 and adsorption 2) | Common *C*W | Independent *K*, *C*W | 1.25 (1,59) | 0.27 |
| Common *K* | Independent *K*, *C*W | 1.43 (1,59) | 0.24 |
| Common *K*, *C*W (one line) | Independent *K*, common *C*W | 0.19 (1,60) | 0.66 |
| Common *K*, *C*W (one line) | Common *K*, independent *C*W | 0.01 (1,60) | 0.91 |
| De-1, ad-1, de-2 and adsorption-2 (common *K*i whithin each of de-1, ad-1, de-2 and adsorption-2) | Common *C*W | Independent *K*, *C*W | 21.08 (1,109) | 0.00001 |
| Common *K* | Independent *K*, *C*W | 20.00 (1,109) | 0.00002 |
| Common *K*, *C*W (one line) | Independent *K*, common *C*W | 0.086 (1,110) | 0.77 |
| Common *K*, *C*W (one line) | Common *K*, independent *C*W | 0.086 (1,110) | 0.32 |
| Barley | | | | |
| De- and adsorption 1  (common *K*i within each of de-1 and adsorption 1) | Common *C*W | Independent *K*, *C*W | 0.89 (1,52) | 0.35 |
| Common *K* | Independent *K*, *C*W | 0.54 (1,52) | 0.47 |
| Common *K*, *C*W (one line) | Independent *K*, common *C*W | 0.97 (1,53) | 0.33 |
| Common *K*, *C*W (one line) | Common *K*, independent *C*W | 1.33 (1,53) | 0.25 |
| De- and adsorption 2  (common *K*i within each of de-2 and adsorption 2) | Common *C*W | Independent *K*, *C*W | 0.02 (1,52) | 0.89 |
| Common *K* | Independent *K*, *C*W | 0.01 (1,52) | 0.92 |
| Common *K*, *C*W (one line) | Independent *K*, common *C*W | 2.37 (1,53) | 0.13 |
| Common *K*, *C*W (one line) | Common *K*, independent *C*W | 2.38 (1,53) | 0.13 |
| De-1, ad-1, de-2 and adsorption-2 (common *K*i whithin each of de-1, ad-1, de-2 and adsorption-2) | Common *C*W | Independent *K*, *C*W | 1.11 (3,108) | 0.35 |
| Common *K* | Independent *K*, *C*W | 0.64 (3,108) | 0.59 |
| Common *K*, *C*W (one line) | Independent *K*, common *C*W | 0.36 (3,111) | 0.79 |
| Common *K*, *C*W (one line) | Common *K*, independent *C*W | 0.84 (3,11) | 0.48 |