

| Varianta | Opakování | Navážka<br>g | dle vzorce       |                  |                          |               |
|----------|-----------|--------------|------------------|------------------|--------------------------|---------------|
|          |           |              | A <sub>662</sub> | A <sub>644</sub> | chl a<br>mg/l            | chl b<br>mg/l |
| Kontrola | 1a        | 0.5041       | 1.239            | 0.482            | 11.6452                  | 4.565982      |
|          | 1b        | 0.5041       | 1.214            | 0.415            | 11.46693                 | 3.24669       |
|          | 2a        | 0.4976       | 1.535            | 0.515            | 14.50859                 | 3.89664       |
|          | 2b        | 0.4976       | 1.542            | 0.517            | 14.5751                  | 3.906942      |
|          | 3a        | 0.489        | 2.075            | 0.722            | 19.58702                 | 5.820822      |
|          | 3b        | 0.489        | 2.101            | 0.734            | 19.82952                 | 5.957034      |
|          | 4a        | 0.445        | 1.663            | 0.631            | 15.6461                  | 5.786856      |
|          | 4b        | 0.445        | 1.658            | 0.625            | 15.60312                 | 5.68155       |
|          | 5a        | 0.5229       | 2.075            | 0.757            | 19.55237                 | 6.570732      |
|          | 5b        | 0.5229       | 2.081            | 0.754            | 19.61404                 | 6.478554      |
|          | 6a        | 0.4777       | 2.482            | 0.968            | 23.32557                 | 9.199068      |
|          | 6b        | 0.4777       | 2.498            | 0.973            | 23.47716                 | 9.231798      |
|          |           |              |                  |                  | <b>průměr<br/>smodch</b> |               |
| bez N    | 1a        | 0.515        | 1.418            | 0.514            | 13.36485                 | 4.419264      |
|          | 1b        | 0.515        | 1.421            | 0.514            | 13.3942                  | 4.405314      |
|          | 2a        | 0.506        | 1.29             | 0.599            | 12.02835                 | 6.835674      |
|          | 2b        | 0.506        | 1.31             | 0.612            | 12.21116                 | 7.021212      |
|          | 3a        | 0.5162       | 0.981            | 0.398            | 9.204084                 | 3.965898      |
|          | 3b        | 0.5162       | 0.955            | 0.377            | 8.97049                  | 3.636852      |
|          | 4a        | 0.4805       | 1.31             | 0.447            | 12.37451                 | 3.485922      |
|          | 4b        | 0.4805       | 1.314            | 0.445            | 12.41563                 | 3.42447       |
|          | 5a        | 0.5297       | 1.635            | 0.578            | 15.42462                 | 4.781478      |
|          | 5b        | 0.5297       | 1.651            | 0.582            | 15.5772                  | 4.792782      |
|          | 6a        | 0.5128       | 1.025            | 0.398            | 9.63458                  | 3.761298      |
|          | 6b        | 0.5128       | 1.029            | 0.406            | 9.665796                 | 3.914106      |
|          |           |              |                  |                  | <b>průměr<br/>smodch</b> |               |
| bez P    | 1a        | 0.525        | 2.382            | 0.968            | 22.34717                 | 9.664068      |
|          | 1b        | 0.525        | 2.395            | 0.978            | 22.46446                 | 9.817878      |
|          | 2a        | 0.518        | 2.346            | 0.872            | 22.08998                 | 7.774572      |
|          | 2b        | 0.518        | 2.408            | 0.915            | 22.65402                 | 8.40759       |
|          | 3a        | 0.449        | 1.217            | 0.448            | 11.46361                 | 3.939798      |
|          | 3b        | 0.449        | 1.213            | 0.443            | 11.42942                 | 3.851268      |
|          | 4a        | 0.5308       | 2.181            | 0.816            | 20.53106                 | 7.341966      |
|          | 4b        | 0.5308       | 2.205            | 0.838            | 20.7441                  | 7.701738      |
|          | 5a        | 0.504        | 2.346            | 0.872            | 22.08998                 | 7.774572      |
|          | 5b        | 0.504        | 2.37             | 0.884            | 22.31292                 | 7.920084      |
|          | 6a        | 0.4449       | 1.644            | 0.577            | 15.51367                 | 4.718202      |
|          | 6b        | 0.4449       | 1.632            | 0.573            | 15.40022                 | 4.688298      |
|          |           |              |                  |                  | <b>průměr<br/>smodch</b> |               |
| bez Fe   | 1a        | 0.5092       | 0.558            | 0.211            | 5.250582                 | 1.926186      |
|          | 1b        | 0.5092       | 0.563            | 0.216            | 5.294552                 | 2.010066      |
|          | 2a        | 0.5039       | 0.205            | 0.079            | 1.92751                  | 0.739404      |
|          | 2b        | 0.5039       | 0.206            | 0.081            | 1.935314                 | 0.777606      |

|    |        |       |       |          |          |
|----|--------|-------|-------|----------|----------|
| 3a | 0.437  | 0.438 | 0.16  | 4.126992 | 1.39146  |
| 3b | 0.437  | 0.411 | 0.151 | 3.871734 | 1.324176 |
| 4a | 0.317  | 0.464 | 0.173 | 4.368506 | 1.549098 |
| 4b | 0.317  | 0.459 | 0.17  | 4.322556 | 1.50807  |
| 5a | 0.3159 | 0.454 | 0.162 | 4.281556 | 1.359912 |
| 5b | 0.3159 | 0.457 | 0.163 | 4.309918 | 1.367388 |
| 6a | 0.3067 | 0.815 | 0.293 | 7.68389  | 2.488068 |
| 6b | 0.3067 | 0.829 | 0.297 | 7.816906 | 2.508672 |

**průměr  
smodch**

přepočet

| chl a<br>mg/g | chl b<br>mg/g | chl a: chl b |
|---------------|---------------|--------------|
| 0.577524      | 0.226442      | 2.550425297  |
| 0.568683      | 0.161014      | 3.531882009  |
| 0.728928      | 0.195772      | 3.723359099  |
| 0.73227       | 0.196289      | 3.730564211  |
| 1.001381      | 0.297588      | 3.364992092  |
| 1.013779      | 0.304552      | 3.328757902  |
| 0.878994      | 0.325104      | 2.703731007  |
| 0.87658       | 0.319188      | 2.746279096  |
| 0.934804      | 0.314149      | 2.975676074  |
| 0.937753      | 0.309742      | 3.027534231  |
| 1.220723      | 0.481425      | 2.535644698  |
| 1.228656      | 0.483138      | 2.543075791  |
| <b>0.892</b>  | <b>0.301</b>  | <b>3.063</b> |
| <b>0.206</b>  | <b>0.098</b>  | <b>0.439</b> |
| 0.648779      | 0.214527      | 3.024225753  |
| 0.650204      | 0.21385       | 3.04046522   |
| 0.594286      | 0.337731      | 1.759643599  |
| 0.603318      | 0.346898      | 1.739181213  |
| 0.445762      | 0.192072      | 2.32080704   |
| 0.434448      | 0.176136      | 2.466553492  |
| 0.643835      | 0.18137       | 3.549852808  |
| 0.645974      | 0.178172      | 3.625561328  |
| 0.727988      | 0.225669      | 3.225910482  |
| 0.73519       | 0.226203      | 3.250138229  |
| 0.469705      | 0.183371      | 2.561504034  |
| 0.471226      | 0.19082       | 2.469477321  |
| <b>0.589</b>  | <b>0.222</b>  | <b>2.753</b> |
| <b>0.103</b>  | <b>0.056</b>  | <b>0.607</b> |
| 1.064151      | 0.460194      | 2.312397636  |
| 1.069736      | 0.467518      | 2.288117656  |
| 1.066119      | 0.375221      | 2.841311908  |
| 1.093341      | 0.405772      | 2.694472732  |
| 0.638286      | 0.219365      | 2.909694355  |
| 0.636382      | 0.214436      | 2.967703624  |
| 0.966987      | 0.345797      | 2.796398676  |
| 0.977021      | 0.362742      | 2.693431015  |
| 1.095733      | 0.385643      | 2.841311908  |
| 1.106792      | 0.392861      | 2.817257999  |
| 0.87175       | 0.265127      | 3.288046167  |
| 0.865375      | 0.263447      | 3.284820632  |
| <b>0.954</b>  | <b>0.347</b>  | <b>2.811</b> |
| <b>0.162</b>  | <b>0.083</b>  | <b>0.294</b> |
| 0.257786      | 0.094569      | 2.72589563   |
| 0.259945      | 0.098687      | 2.634018982  |
| 0.09563       | 0.036684      | 2.606842809  |
| 0.096017      | 0.038579      | 2.488810529  |

dle vzorce:

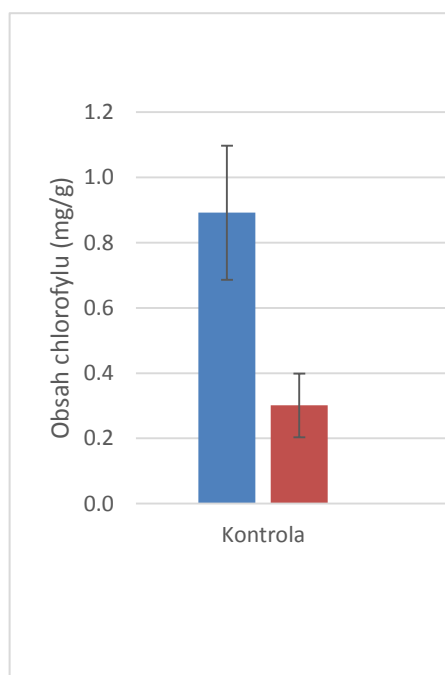
$$\text{chlorofyl } a = 9,784 \times A_{662} - 0,990 \times A_{644}$$

$$\text{chlorofyl } b = 21,426 \times A_{644} - 4,650 \times A_{662}$$

následný přepočet:

(Výpočet dle vzorce-mg/l \* 0,025l)/navážka-g  
V=25ml

| GRAF     | mg <sub>chlorofylu</sub> /g <sub>FW listu</sub> |       |
|----------|---|-------|
| Varianta | Chl a   | Chl b |
| Kontrola | 0.892   | 0.301 |
| bez N    | 0.589   | 0.222 |
| bez P    | 0.954   | 0.347 |
| bez Fe   | 0.316   | 0.107 |



|          |          |             |
|----------|----------|-------------|
| 0.236098 | 0.079603 | 2.965943685 |
| 0.221495 | 0.075754 | 2.92388172  |
| 0.344519 | 0.122169 | 2.820032044 |
| 0.340896 | 0.118933 | 2.866283395 |
| 0.338838 | 0.107622 | 3.148406662 |
| 0.341082 | 0.108214 | 3.15193493  |
| 0.626336 | 0.20281  | 3.088295818 |
| 0.637179 | 0.204489 | 3.11595378  |

|              |              |              |
|--------------|--------------|--------------|
| <b>0.316</b> | <b>0.107</b> | <b>2.878</b> |
|--------------|--------------|--------------|

|              |              |              |
|--------------|--------------|--------------|
| <b>0.164</b> | <b>0.051</b> | <b>0.218</b> |
|--------------|--------------|--------------|

[mg.l<sup>-1</sup>]  
[mg.l<sup>-1</sup>]

mg chlorofylu / g FW listu

| Chl a - SMODCH | Chl b - SMODCH |
|----------------|----------------|
| 0.206          | 0.098          |
| 0.103          | 0.056          |
| 0.162          | 0.083          |
| 0.164          | 0.051          |

