**S1 Table. The Pearson correlations between phytoplankton and zooplankton variables of Nansi Lake in different seasons.**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Spring | Summer |
| 　 | 　 | DensityTZ | DensityCru | BiomassTZ | BiomassCru | DensityTZ | DensityCru | BiomassTZ | BiomassCru  |
| Spring | DensityTPh | -.261 | -.373 | -.376 | -.373 | -.344 | -.142 | -.146 | -.145 |
| DensityCya | .650 | **.805\*\*** | **.815\*\*** | **.805\*\*** | **.757\*** | .252 | .261 | .248 |
| DensityEug | -.026 | -.114 | -.112 | -.114 | -.023 | -.298 | -.296 | -.299 |
| DensityPyr | .403 | -.045 | -.022 | -.045 | .379 | .011 | .021 | .017 |
| DensityXan | -.157 | -.363 | -.361 | -.363 | .040 | .041 | .045 | .047 |
| DensityCry | -.171 | -.441 | -.437 | -.441 | -.398 | -.320 | -.325 | -.323 |
| DensityBac | -.143 | .446 | .426 | .446 | .295 | **.789\*** | **.788\*** | **.790\*** |
| DensityChl | -.529 | .040 | .010 | .040 | -.180 | .227 | .224 | .222 |
| BiomassTPh | .014 | .412 | .401 | .412 | .078 | .529 | .521 | .527 |
| BiomassCya | .660 | **.803\*\*** | **.814\*\*** | **.803\*\*** | **.755\*** | .242 | .251 | .239 |
| BiomassEug | .291 | -.004 | .012 | -.004 | -.107 | -.216 | -.219 | -.216 |
| BiomassPyr | .400 | -.050 | -.028 | -.050 | .372 | .008 | .018 | .014 |
| BiomassXan | -.157 | -.364 | -.361 | -.364 | .040 | .041 | .044 | .047 |
| BiomassCry | .070 | -.270 | -.258 | -.270 | .003 | -.212 | -.212 | -.213 |
| BiomassBac | -.131 | .572 | .548 | .572 | .130 | .666 | .660 | .663 |
| BiomassChl | -.529 | .040 | .010 | .040 | -.181 | .227 | .224 | .222 |
| Summer | DensityTPh | -.460 | -.274 | -.290 | -.274 | -.196 | -.231 | -.228 | -.231 |
| DensityCya | -.526 | -.414 | -.430 | -.414 | -.424 | -.305 | -.304 | -.305 |
| DensityEug | .295 | -.057 | -.040 | -.057 | -.134 | -.369 | -.366 | -.371 |
| DensityPyr | -.558 | -.003 | -.033 | -.003 | -.096 | .275 | .271 | .271 |
| DensityXan | -.357 | -.222 | -.234 | -.222 | -.157 | -.229 | -.229 | -.230 |
| DensityCry | .065 | **.771\*** | **.751\*** | **.771\*** | .488 | **.730\*** | **.731\*** | **.725\*** |
| DensityBac | -.405 | -.227 | -.243 | -.228 | -.086 | -.214 | -.210 | -.215 |
| DensityChl | -.453 | -.326 | -.341 | -.326 | -.288 | -.319 | -.317 | -.320 |
| BiomassTPh | -.447 | -.278 | -.294 | -.278 | -.173 | -.245 | -.241 | -.245 |
| BiomassCya | -.526 | -.414 | -.430 | -.414 | -.425 | -.305 | -.304 | -.305 |
| BiomassEug | .295 | -.057 | -.040 | -.057 | -.134 | -.369 | -.366 | -.371 |
| BiomassPyr | -.300 | .507 | .476 | .507 | .063 | .576 | .571 | .574 |
| BiomassXan | -.361 | -.227 | -.240 | -.227 | -.163 | -.233 | -.233 | -.235 |
| BiomassCry | .099 | **.685\*** | **.670\*** | **.685\*** | .503 | .665 | **.667\*** | .660 |
| BiomassBac | -.405 | -.227 | -.242 | -.227 | -.086 | -.214 | -.210 | -.215 |
| BiomassChl | -.453 | -.326 | -.341 | -.326 | -.288 | -.319 | -.317 | -.320 |

TZ = total zooplankton; Cru = Crustacea; TPh = total phytoplankton; Cya = Cyanophyta; Eug = Euglenophyta; Pyr = Pyrrophyta; Xan = Xanthophyta; Cry = Cryptophyta; Bac = Bacillariophyta; Chl = Chlorophyta; \*p<0.05; \*\*p<0.01.