**Effect of reduced nitrogen fertilization (according to the EC's "Field to Table" strategy) on the chemical and biological traits of soils under maize crops\*\***

*Agnieszka Wolińska1, Artur Banach1\*, Anna Kruczyńska1, Anna Sochaczewska1, Weronika Goraj1, Jacek Podlewski2, Andrzej Słomczewski2, and Agnieszka Kuźniar1*

1 Department of Biology and Biotechnology of Microorganisms, The John Paul II Catholic University of Lublin, Konstantynów 1 I Str., 20-708 Lublin, Poland

2 CGFP Sp. z o.o., Wojnowo 5, 86-014 Sicienko, Poland

\* Corresponding author e-mail: artur.banach@kul.pl

\*\* Scientific work supported by the state budget (Poland) under the program of the Ministry of Education and Science named "Science for the Society" project number NdS/531260/2021/2021, the amount of funding 100%, the total value of the project 625 910.50 PLN

SUPPLEMENTARY MATERIALS

**Table S1.** The correlation analysis between studied parameters with r-value given with their significance (\* - p < 0.05, \*\* - p < 0.01).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **pH** | **WHC** | **Ca** | **Mg** | **K** | **TC** | **N-NO3** | **N-NH4** | **Olsen P** | **EDC** | **TS** | **AR** | **CKH** |
| **PPW** | .591\*\* | -- |  |  |  |  |  |  |  |  |  |  |  |
| **Ca** | .725\*\* | .662\*\* | -- |  |  |  |  |  |  |  |  |  |  |
| **Mg** | .636\*\* | .703\*\* | .804\*\* | -- |  |  |  |  |  |  |  |  |  |
| **K** | .583\*\* | .616\*\* | .614\*\* | .774\*\* | -- |  |  |  |  |  |  |  |  |
| **TC** | .313\*\* | .430\*\* | .312\*\* | .433\*\* | .328\*\* | -- |  |  |  |  |  |  |  |
| **N-NO3** | -.596\*\* | -.621\*\* | -.534\*\* | -.532\*\* | -.477\*\* | -.328\*\* | -- |  |  |  |  |  |  |
| **N-NH4** | .644\*\* | .639\*\* | .561\*\* | .575\*\* | .542\*\* | .512\*\* | -.644\*\* | -- |  |  |  |  |  |
| **Olsen P** | .434\*\* | .615\*\* | .416\*\* | .506\*\* | .554\*\* | .374\*\* | -.659\*\* | .734\*\* | -- |  |  |  |  |
| **EDC** | .760\*\* | .749\*\* | .791\*\* | .820\*\* | .764\*\* | .451\*\* | -.686\*\* | .735\*\* | .694\*\* | -- |  |  |  |
| **TS** | .472\*\* | .453\*\* | .404\*\* | .474\*\* | .375\*\* | .453\*\* | -.364\*\* | .406\*\* | .300\*\* | .556\*\* | -- |  |  |
| **AR** | .598\*\* | .624\*\* | .628\*\* | .659\*\* | .561\*\* | .372\*\* | -.574\*\* | .583\*\* | .593\*\* | .744\*\* | .407\*\* | -- |  |
| **CKH** | -.530\*\* | -.353\*\* | -.493\*\* | -.482\*\* | -.540\*\* | -.009 | .379\*\* | -.405\*\* | -.374\*\* | -.502\*\* | -.191\*\* | -.334\*\* | -- |
| **E4/6** | -.307\*\* | -.266\*\* | -.318\*\* | -.202\*\* | -.171\*\* | -.106 | .234\*\* | -.137\* | -.184\*\* | -.287\*\* | -.131\* | -.237\*\* | .085 |



**Figure S1.** Correlogram between studied parameters for data collected before sowing maize.



**Figure S2.** Correlogram between studied parameters for data collected after harvesting maize.