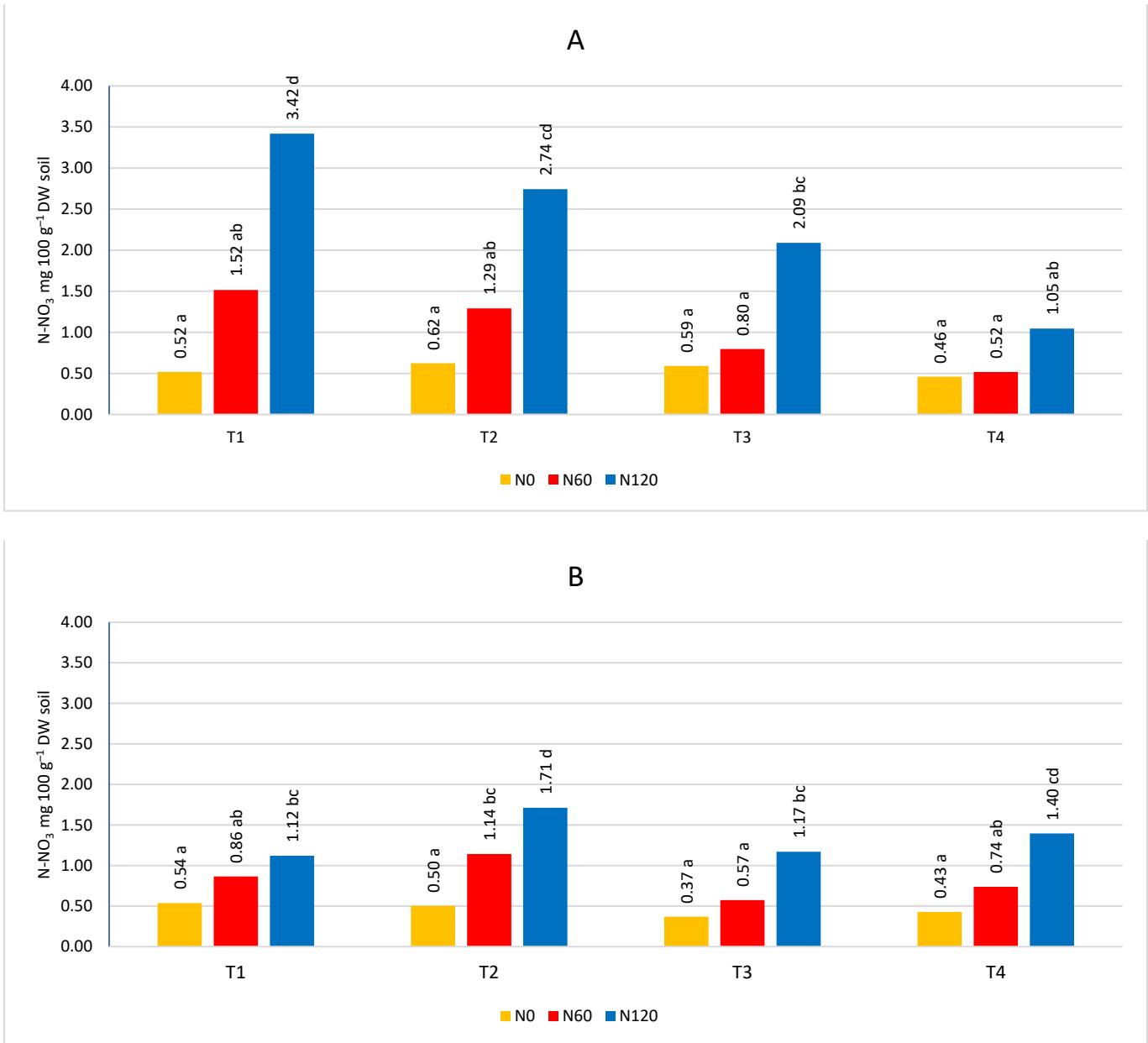
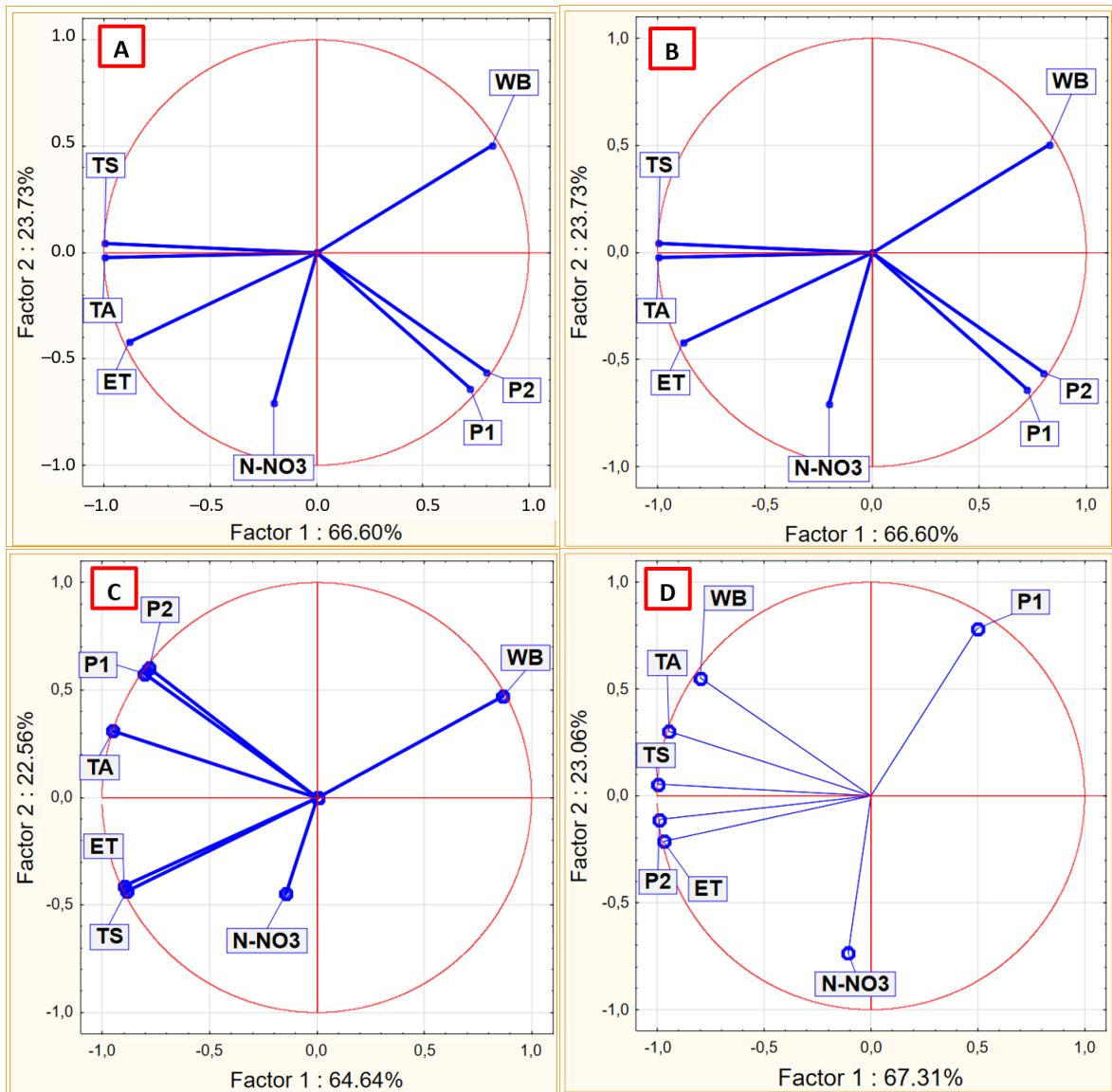


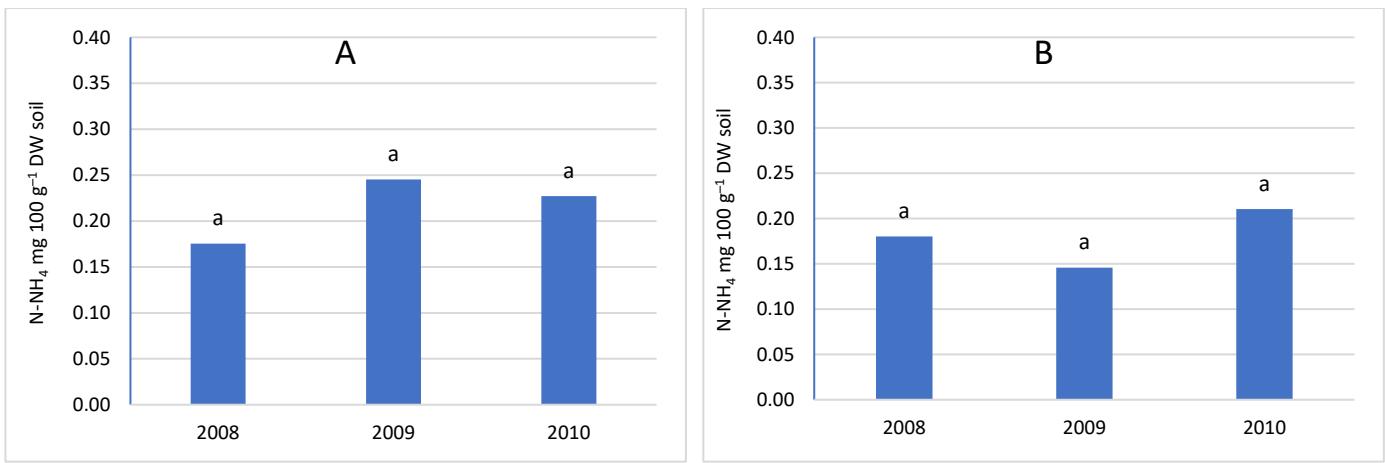
**Figure S1.** The content of N-NH<sub>4</sub> depending on the term and nitrogen fertilization A- in the soil layer 0-20 cm, B- soil layer 21-40 cm. The nitrogen determination: T1-term after flowering trees, T2-term during the intensive fruit growth, T3 term after fruit harvest in August, T4 term after the end of vegetation.



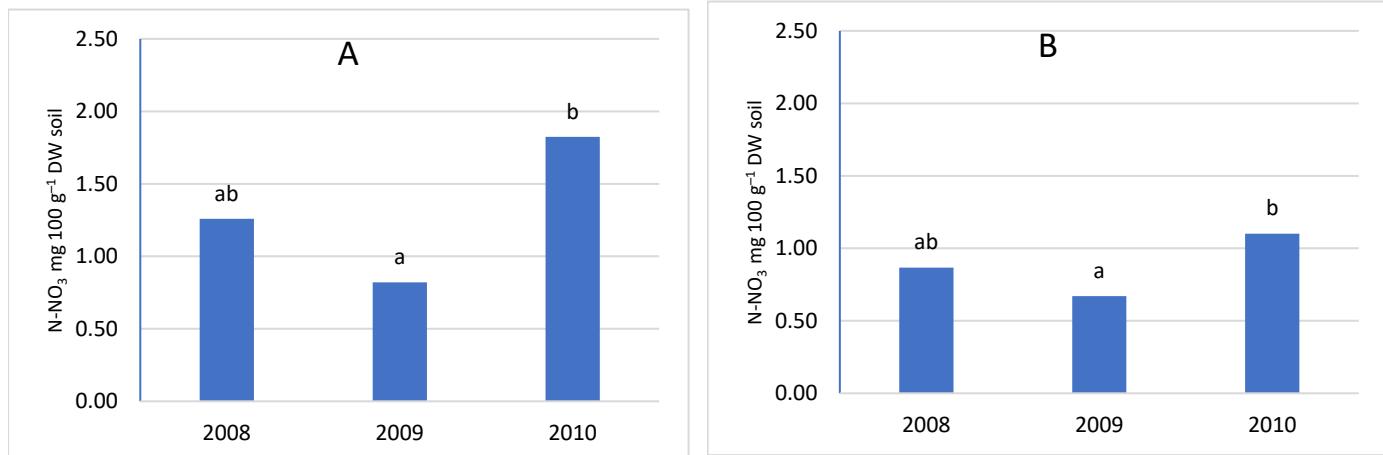
**Figure S2.** The content of  $\text{N-NO}_3$  depending on the term and nitrogen fertilization  
A in the soil layer 0-20 cm, B in the soil layer 21-40 cm.



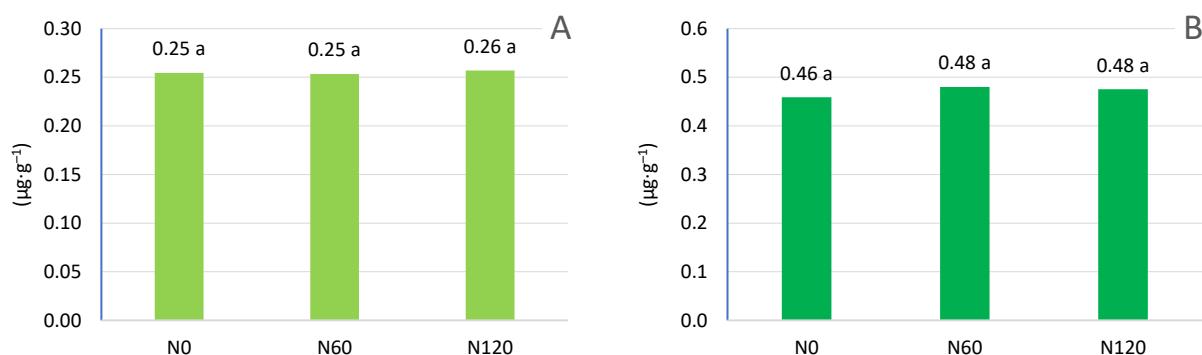
**Figure S3.** Influence of climatic conditions on the nitrate nitrogen content in the soil according to the sampling time, as shown by PCA. A- sampling time T1, B- sampling time T2, C- sampling time T3, D – sampling time T4. WB- water balance, P1- sum precipitation 30 days before sampling, P2 sum precipitation 14 days before sampling, TA- average temperature 30 days before sampling, TS- soil temperature. ET- evapotranspiration.

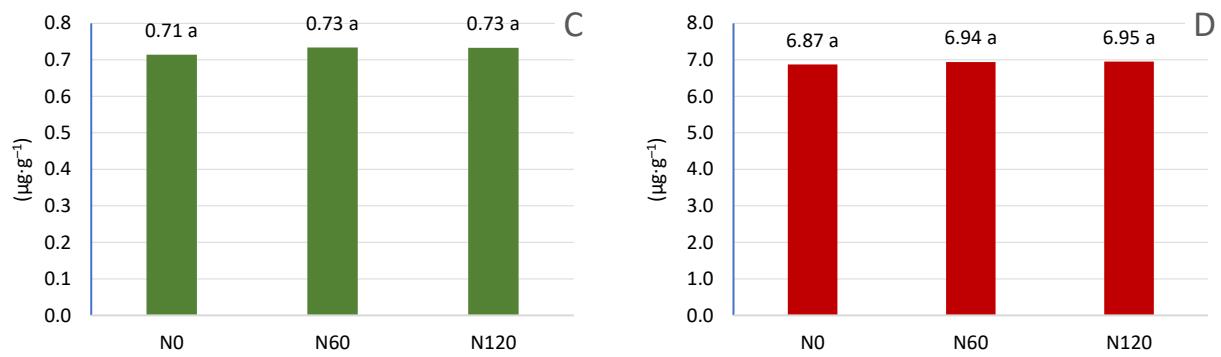


**Figure S4.** The content of N-NH<sub>4</sub> depending on the year of research A- in the soil layer 0-20 cm, B- in the soil layer 21-40 cm.



**Figure S5.** The content of N-NO<sub>3</sub> according to the year of research A- in the soil layer 0-20 cm, B- in the soil layer 21-40 cm.





**Figure S6.** The content of pigments in the leaves depends on nitrogen fertilization. A- chlorophyll a, B- chlorophyll b, C- chlorophyll a+b, D- Carotenoids.