

## **Supplementary Information:**

### ***DNA isolation protocol***

Modifications of the manufacture's protocol of

GeneMATRIX Plant & Fungi DNA Purification Kit (EURx, Poland),

After adding lyse P buffer, proteinase K and RNase A to the homogenate it was vortexed and incubated for 30 min at 65°C. Subsequently, AC-buffer was added to the sample and incubated for 5 min on ice then centrifuged. The supernatant was transferred and mixed with ethanol and Sol P buffer and centrifuged for 1 minute in 12.000 rpm. A portion of supernatant was moved to a minicolumn and centrifuged, the filtrate was removed and washing buffer (Wash PX) was added and centrifuged, this step was done twice. Minicolumn was placed on Eppendorf 1.5 ml tube, elution buffer (10 mM Tris-HCl, pH 8.5) was added, tubes were centrifuged for 1 minute in 12.000 rpm, microcolumns were removed. From this point DNA was ready for any further analysis it was stored in 2÷8°C or in the freezer in -20°C.