Duckweed total genomic DNA isolation with CTAB

1. collect 0.2g plant material and place in 2ml eppendorf tube with 3 ball bearings. Flash freeze by dropping into liquid N2.
2. grind tissue with a Retsch grinder
3. add 800ul of CTAB working buffer in the tube
4. incubate at 60℃ for 30min
5. vortex
6. extract DNA 2 times with chloroform/isoamylalcohol(24:1) 500ul
7. precipitate with 2/3 volume isopropanol(400ul)
8. microfuge 30min at room temperature
9. wash with 70℃ ethanol
10. resuspend pellet in 30-50ul water(add 0.5ul RNase 5mg/ul)

stock CTAB recipe

2% CTAB	2g
1.4M NaCl	28ml of 5M
200mM EDTA pH8	4ml 0.5M
100mM Tris-HCl pH8	10ml 1M
total	100ml

10 ml working CTAB buffer

stock CTAB	10ml
100mM B-ME(add fresh)	100ul

Reference

Murray MG, Thompson WF: Rapid isolation of high molecular weight plant DNA. Nucleic Acids Res 1980, 8(19):4321-4325.