

## **S1 File:** solutions for protoplasts' isolation

### **Cell-wall digestion enzyme solution**

MES: 2-[N-morpholino]-ethanesulfonic acid; CaCl<sub>2</sub>: calcium chloride, KCl: potassium chloride

<b>Macerozyme R-10</b>	0,5%
<b>Cellulase R-10</b>	1%
<b>MES</b>	20 mM
<b>Mannitol</b>	0,5 M
<b>KCl</b>	20 mM
<b>CaCl<sub>2</sub></b>	10 mM

### **Washing solution**

MES: 2-[N-morpholino]-ethanesulfonic acid; NaCl: sodium chloride; CaCl<sub>2</sub>: calcium chloride, KCl: potassium chloride

<b>Glucose</b>	5 mM
<b>MES</b>	2 mM
<b>NaCl</b>	154 mM
<b>CaCl<sub>2</sub></b>	125 mM
<b>KCl</b>	5 mM

### **MMG solution**

MgCl<sub>2</sub>: magnesium chloride

<b>Mannitol</b>	0,5 M
<b>MES</b>	4 mM
<b>MgCl<sub>2</sub></b>	15 mM