

Materials List for:

Lateral Root Inducible System in *Arabidopsis* and Maize

Hanne Crombez^{1,2}, Ianto Roberts^{1,2}, Nick Vangheluwe^{1,2}, Hans Motte^{1,2}, Leentje Jansen^{1,2}, Tom Beeckman^{1,2}, Boris Parizot^{1,2}

¹Department of Plant Systems Biology, VIB, Ghent

²Department of Plant Biotechnology and Bioinformatics, Ghent University

*These authors contributed equally

Correspondence to: Tom Beeckman at tobee@psb.vib-ugent.be

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Materials

| Name | Company | Catalog Number | Comments |
|--|------------------------|----------------|---|
| ARABIDOPSIS LRIS | | | |
| Seeds | | | |
| Arabidopsis seeds | | | Col-0 ecotype |
| Gas sterilization of seeds | | | |
| micro-centrifuge tubes 1.5 ml | SIGMA-ALDRICH | 0030 125.215 | Eppendorf microtubes 3810X, PCR clean |
| micro-centrifuge tubes 2 ml | SIGMA-ALDRICH | 0030 120.094 | Eppendorf Safe-Lock microcentrifuge tubes |
| hydrochloric acid | Merck KGaA | 1,003,171,000 | 37% (fuming) for analysis EMSURE ACS,ISO,Reag. Ph Eu |
| glass desiccator | SIGMA-ALDRICH | | Pyrex |
| glass beaker | | | |
| plastic micro-centrifuge tubes box or holder | | | |
| Bleach sterilization of seeds | | | |
| ethanol | Chem-Lab nv | CL00.0505.1000 | Ethanol, abs. 100% a.r. dilute to 70% |
| sodium hypochlorite (NaOCl) | Carl Roth | 9062.3 | 12% |
| Tween 20 | SIGMA-ALDRICH | P1379 | |
| sterile water | | | |
| Growth medium | | | |
| Murashige and Skoog salt mixture | DUCHEFA Biochemie B.V. | M0221-0050 | |
| myo-inositol | SIGMA-ALDRICH | I5125-100G | |
| 2-(N-morpholino)ethanesulfonic acid (MES) | DUCHEFA Biochemie B.V. | M1503.0100 | |
| sucrose | VWR, Internation LLC | 27483.294 | D(+)-Sucrose Ph. Eur. |
| KOH | Merck KGaA | 1050211000 | pellets for analysis (max. 0.002% Na) EMSURE ACS,ISO,Reag. Ph Eur |
| Plant Tissue Culture Agar | LabM Limited | MC029 | |
| Lateral root induction chemicals | | | |
| N-1-naphthylphthalamic acid (NPA) | DUCHEFA Biochemie B.V. | No. N0926.0250 | 10 µM (Arabidopsis) |
| 1-naphthalene acetic acid (NAA) | DUCHEFA Biochemie B.V. | No. N0903.0050 | 10 µM (Arabidopsis) |
| dimethylsulfoxide (DMSO) | SIGMA-ALDRICH | 494429-1L | |
| Making a mesh for transfer | | | |
| nylon mesh | Prosep byba | | Synthetic nylon mesh 20 µm |

| | | | |
|---|------------------------------|-----------------|---|
| Sowing and seedling handling | | | |
| square petri dish plates | GOSSELIN | BP124-05 | 12 x 12 cm |
| 50 ml DURAN tubes | SIGMA-ALDRICH | CLS430304 | Corning 50 ml centrifuge tubes |
| drigalski | Carl Roth | K732.1 | |
| pipette | | | |
| cut pipette tips | Daslab | 162001X | Universal 200, cut off 5 mm of tip before autoclaving |
| breathable tape | 3M Deutschland GmbH | cat. no. 1530-1 | |
| tweezers | Fiers nv/sa | K342.1; K344.1 | Dumont tweezers type a nr 5; Dumont tweezers type e nr 7 |
| Growth conditions | | | |
| growth room | | | 21 °C, continuous light |
| Materials | Company | Catalog | Comments |
| MAIZE LRIS | | | |
| Seeds | | | |
| Maize kernels | | | B-73 |
| Bleach sterilization of kernels | | | |
| glass beaker | | | |
| magnetic stirrer | Fiers nv/sa | C267.1 | |
| sodium hypochlorite (NaOCl) | Carl Roth | 9062.3 | 12% |
| sterile water | | | |
| Lateral root induction chemicals | | | |
| N-1-naphthylphthalamic acid (NPA) | DUCHEFA Biochemie B.V. | No. N0926.0250 | 50 µM (maize primary root), 25 µM (maize adventitious root) |
| 1-naphthalene acetic acid (NAA) | DUCHEFA Biochemie B.V. | No. N0903.0050 | 50 µM (maize) |
| dimethylsulfoxide (DMSO) | SIGMA-ALDRICH | 494429-1L | |
| Sowing and seedling handling | | | |
| paper hand towels | Kimberly-Clark Professional* | 6681 | SCOTT Hand Towels - Roll / White; sheet size (24 x 46 cm) |
| seed germination paper | Anchor Paper Company | | 10 X 15 38# seed germination paper |
| tweezers | Fiers nv/sa | K342.1; K344.1 | Dumont tweezers type a nr 5; Dumont tweezers type e nr 7 |
| 250 ml (centrifuge) tubes | SCHOTT DURAN | 2160136 | approx. 5.6 cm diameter and 14.7 cm height |
| 700 ml tubes | DURAN GROUP | 213994609 | cylinders, round foot tube, D 60 x 250 |
| rack | | | for maize tubes, home made |
| sterile water | | | |
| Growth conditions | | | |
| growth cabinet | | | 27 °C, continuous light, 70% relative humidity |