

# Combining Clearing and Fluorescence Microscopy for Visualising Changes in Gene Expression and Physiological Responses to *Plasmodiophora brassicae*

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## Materials

Name	Company	Catalog Number	Comments
2N Sulfuric acid (H <sub>2</sub> SO <sub>4</sub> )	Roth	UN2796	pH adjustment
Agarose	PRONA	BGQT100	Embedding
Basic Fuchsin	BIOSHOP	BSF410.5	Fluorescent dye
Calcofluor White	Sigma Aldrich	18909-100ML-F	Fluorescent dye
Commercial Bleach	Domestos		
Cyanoacrylate/ Instant glue	Kropelka		Adhesive
Dimethyl Sulfoxide (DMSO)	BIOSHOP	DMS555.500	Solvent
Epifluorescence microscope	Carl Zeiss M2 automated epifluorescence microscope with Colibri LED system	Carl Zeiss M2	Carl Zeiss Filter Set filter set 38, 43, 49 used
Fully automated Vibratome	Leica	VT1200 S	
Lightmeter /Photometer	LI-COR Biosciences	LI-250A + LI-190R quantum sensor	For measuring light intensity within the 400-700nm (PAR) waveband
Masking tape			For sticking agarose block on mould
Murashige & Skoog Medium (MS Medium)	Duchefa Biochemie	MO222.0050	Plant Growth Medium
Nile Red	Sigma Aldrich	N3013-100MG	Fluorescent dye
Paraformaldehyde PFA	Sigma Aldrich	158127-100G	Fixative
Potassium Chloride (KCl)	POCH	739740114	PBS component
Potassium Hydroxide (KOH)	Sigma Aldrich	P1767-250G	pH adjustment
Potassium Phosphate Monobasic (KH <sub>2</sub> PO <sub>4</sub> )	BIOSHOP	PPM302.500	PBS component
Sodium chloride (NaCl)	BIOSHOP	SOD001.1	PBS component
Sodium Deoxycholate	Sigma Aldrich	D6750-25G	Clearing Solution

Sodium Phosphate Dibasic ( $\text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O}$ )	POCH	799490116	PBS component
Triton X-100	BIOSHOP	TRX506.100	Fixative
Urea	Sigma Aldrich	U5378-100G	Clearing Solution
Vacuum/Pressure pump and Dessicator	Welch by Gardner Denver	2522C-02	For Vacuum Infiltration
Xylitol	Sigma Aldrich	X3375-25G	Clearing Solution (componenet)