

Assessing Structural Traits in *Triticum aestivum* and *Zea mays* for C₃ and C₄ Photosynthetic Differentiation Using Free-hand and Semi-thin Sections

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Materials

| Name | Company | Catalog Number | Comments |
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| Disodium hydrogen phosphate dihydrate (Na ₂ HPO ₄ ·2H ₂ O) pure | PENTA, CZ | 10028-24-7 | |
| Embedding Film, 7.8 mil Thick, 8 x 12.5, (203 x 318mm) | ACLAR, US | 10501-10 | |
| Ethanol, abs. 100% a.r. | Chem-Lab NV, BE | CL00.0505.1000 | Danger: Highly flammable liquid and vapour. |
| EVOS Invitrogen FL Auto 2 Imaging System | Thermo Fisher Scientific, US | | |
| Flat Embedding PTFE Mold with Metal Frame, 16 cavities | PELCO, US | 10501 | |
| Glass vial 2 ml | VWR Life Science, US | 548-0045 | |
| Glutaraldehyde 50% solution | VWR Life Science, US | 23H2856331 | Danger: Fatal if inhaled. Toxic if swallowed. Causes severe skin burns and eye damage. May cause respiratory irritation. Wear protective gloves, protective clothing, eyes and face protection. |
| Histo diamond knife | Diatome, US | | |
| LEICA EM UC7 | Leica Vienna, AT | | |
| LR White resin hard grade | Electron Microscopy Sciences, US | 14383 | Danger: Causes skin irritation. Causes severe eye irritation May cause respiratory irritation. May cause drowsiness or dizziness Wear protective gloves, protective clothing, eyes and face protection. |
| Microscope slides | Normax, PT | 5470308A | |
| Nikon Eclipse E600 and Nikon DSOFi1 5 MP | Nikon Corporation, JP | | |
| Osmium Tetroxide (OsO ₄) | Agar Scientific Ltd, GB | R1019 | Danger: Fatal if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage Wear |

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| | | | double protective gloves, protective clothing, eyes and face protection. |
| Pipette and pipette tips | Thermo Scientific, FI | KJ16047 | |
| Sodium dihydrogen phosphate dihydrate ($\text{NaH}_2\text{PO}_4 \cdot 2\text{H}_2\text{O}$) pure | PENTA, CZ | 13472-35-0 | |
| Syringe 10 ml | Ecoject, DE | 20010 | |
| Toluidine blue, general purpose grade | Fisher Scientific, GB | 2045836 | |