

ROOT SCANNER

Make of MS	: Regent Instruments Inc. Ltd., Quebec, Canada
Model	: Root Scanner: Epson Perfection V 700 Photo Programme: Win-RHIZO Programme V. 2009 c 32-bit Software
Specification	: WinRHIZO Pro Software, Scanner STD (22 cm X 30 cm) with special lighting system & Positioning system Scanning Area, Special Lighting system to avoid shadows, Permanent calibration to increase the measurement precision.



Root morphology measurement is accomplished in destructive method only. The root samples are ready for analysis after extraction from soil and washing. Before Analysis, the roots are digitized with a scanner. The root scanner analyses roots using desktop scanner, suitable for image acquisition of macroscopic roots. Scanner is available as accessories for root positioning & scanning. Only fresh roots should be used.

Type of analysis possible

S. No.	Type of analysis	Data will be available in notepad
1	Total Root Length	
2	Average diameter of root	
3	Total surface area of root	
4	Total root volume	
5	Number of tips	
6	Number of forks & crossings	
7	Colour analysis	

Contact Us

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User Instruction

Root Scanner operation procedure

Open the Root Scanner window at the back side



Switch on the Root Scanner



Click on the WinRhizo 2009c programme on the Computer desktop



Select WinRhizo



Select “EPSON Perfection V700/V750 3.81 (32-32)”



Select “Image” from Toolbar



Select “Acquisition parameter”



} Use TWAIN

} Negative Image



Click on the Image “”



Click on “Scan”



Zoom to $\frac{1}{6}$ - $\frac{1}{8}$



Select the area covered by the root as shown after Zooming



Identification of Sample & Saving the file