



METER
ENVIRONMENT

A COMPARISON OF WATER POTENTIAL INSTRUMENT RANGES

Contributors



Water potential is the most fundamental and essential measurement in soil physics because it describes the force that drives water movement. Making good water potential measurements is largely a function of choosing the right instrument and using it skillfully. In an ideal world, there would be one instrument that simply and accurately measured water potential over its entire range from wet to dry. In the real world, there is an assortment of instruments, each with its unique personality. Each has its quirks, advantages, and disadvantages. Each has a well-defined range.

Below is a comparison of water potential instruments and the ranges they measure.

WATER POTENTIAL INSTRUMENT RANGES

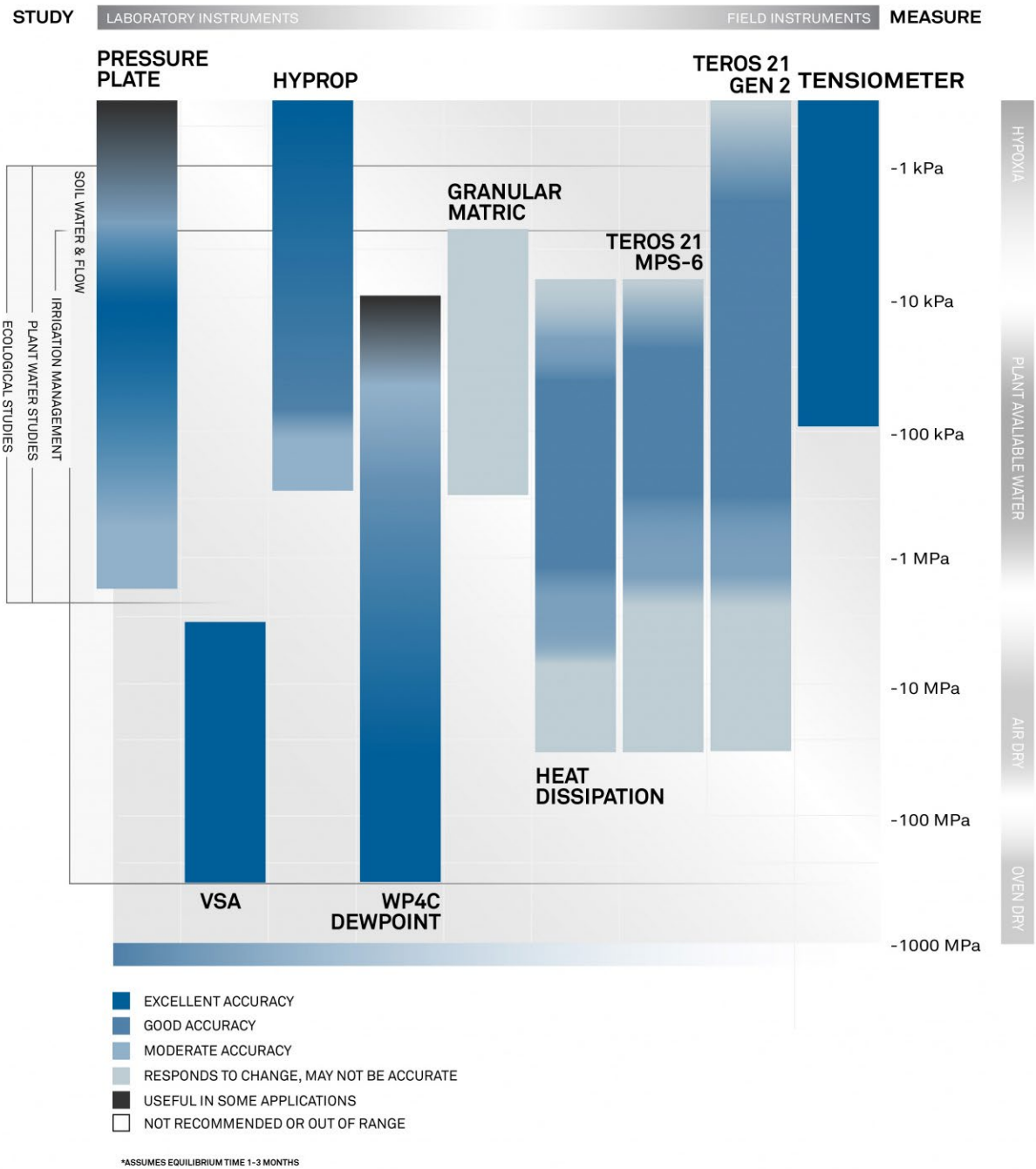


Figure 1. A range comparison of water potential instruments such as the [HYPROP](#), [WP4C](#), [VSA](#), [MPS-6](#), [tensiometer](#), and [TEROS 21](#) matric potential sensor

CHOOSE THE RIGHT INSTRUMENT

In this [webinar](#) learn water potential instrument theory, including the challenges of measuring water potential and how to choose and use various water potential instruments.

TAKE OUR SOIL MOISTURE MASTER CLASS

Six short videos teach you everything you need to know about soil water content and soil water potential—and why you should measure them together. Plus, master the basics of soil hydraulic conductivity.

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Want to know more about measuring water potential in your unique application? METER scientists have over 100 years combined experience measuring soil hydraulic and physical properties.

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