



**Figure 6. Sensor calibrations for three soil substrates.** Calculated gravimetric water content (GWC) percentages, determined by measuring soil mass during substrate dry-down, were compared with soil sensor conductance values from the probes (measured in Siemens). Data shown are for two samples from each of three distinct soil substrates. Soil substrates were (a) a silt loam soil, (b) a moss biocrust, and (c) a fine sand soil. (a) The relationship of GWC and conductance values in predominantly silt loam soils was best represented by a power regression. (b) A strong linear relationship of GWC and sensor conductance was observed for biocrusts dominated by the moss *Syntrichia caninervis*. (c) A linear regression best represented the relationship between GWC and sensor conductance measurements in fine sand soils. At high GWC values the conductance values diverge from the calibration curve, indicating a potential limitation of the sensors when soils are saturated.