


References


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The boundaries of soil peds are planes of weakness, and the peds separate at the same locations with each drying event. Visible soil cracks follow the boundaries of peds. The cracking geometry of soils can be deduced from soil structure characteristics but random cracking is not natural in soils. The cracking geometry of soils can be deduced from soil structure characteristics (White, 1967).

The boundaries of soil peds are planes of weakness, and the peds separate at the same locations with each drying event. Visible soil cracks follow the boundaries of peds. It is possible that prewashing the wicks with 0.01 M HNO₃ increased the sensitivity of the wicks to further weathering in the field. However, our preliminary laboratory studies indicated that (i) washing the material with deionized water for 1–2 wk was insufficient for removing soluble materials that would later contaminate acidic soil solutions and (ii) wick dissolution effects appeared to diminish with time in the field (on the time scale of months).

It is apparent that researchers should be aware of potential artifacts in order to minimize them. In our case, direct comparison with other means of in situ soil solution collection proved to be a useful way to reveal problems. As mentioned in Goyne et al. (2000), we believe that alternative sources of fiberglass wicking material and cleaning procedures should be investigated to diminish unwanted effects.