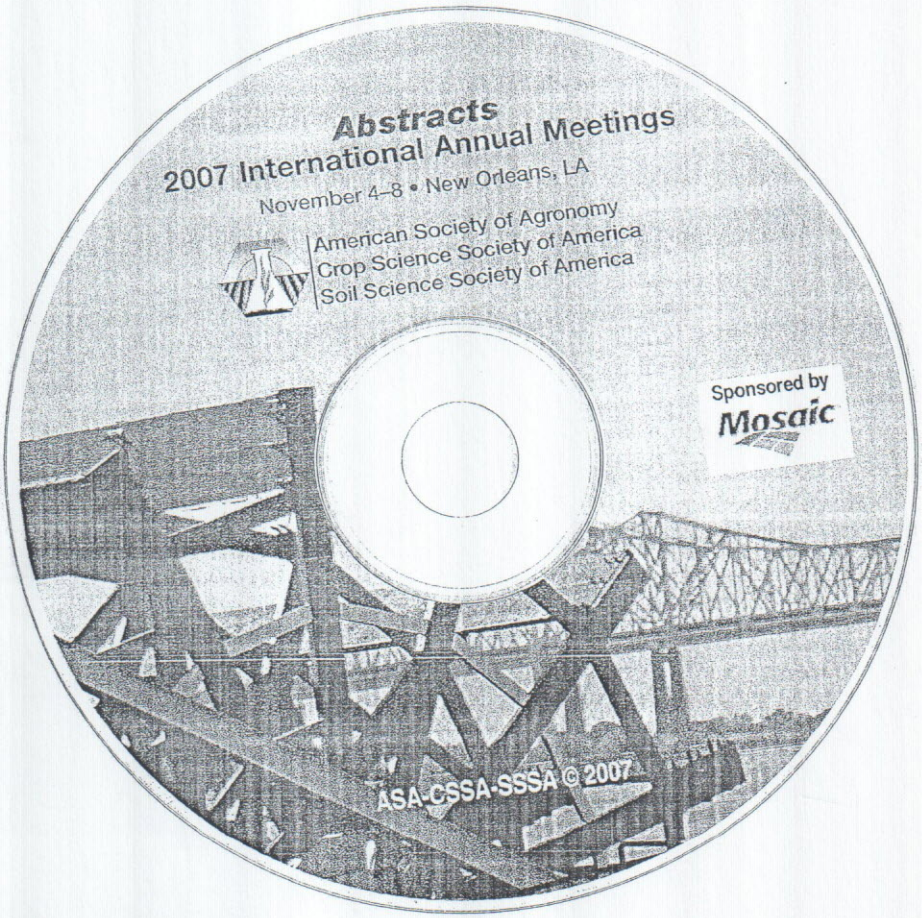
Abstracts
2007 International Annual Meetings
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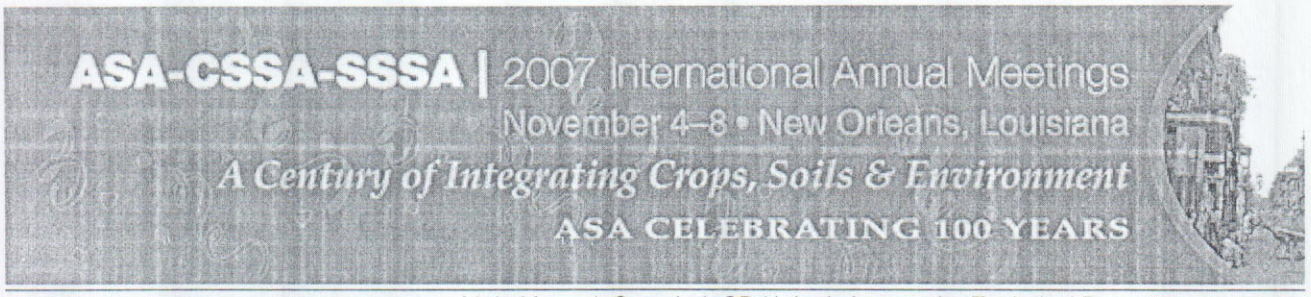

Note: Program subject to change without notice

Tuesday, November 6, 2007
183-3

Performance of the Arya and Paris Water Retention Model with the UNSODA Database.

Carlos M. Vaz[1], João M. Naime[1], Vivien V.T. Shinya[1], and Martinus Van Genuchten[2]. (1) Embrapa Agricultural Instrumen novembro, 1452, São Carlos, 13560-970, Brazil, (2) USDA-ARS, U.S. Salinity Laboratory, USDA-ARS, 450 W. Big Springs CA 92507-4617

The Arya and Paris model (AP) predicts soil water retention curves from soil particle distribution (PSD) based on the distrib between these two parameters using a scaling factor á to estimate porous radius from particle radius. In a previous work w demonstrate that the best performance of the model is obtained using á as a function of the water content (è), obtained wit samples of Brazilian soils. In the present work we have applied the Arya and Paris model for the UNSODA database, comp predicted soil water content with measured values of soil water retention curves for laboratory and field determinations. Bot and laboratory) have shown good correlation (RMSD between 0.05 and 0.08 m3 m-3) between estimated by AP model and but a group of soil presented very bad correlation indicating possible imprecise retention or particle size distribution data in

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