



Effect of polyacrylamide on soil physical and hydraulic properties

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The effect of polyacrylamide (PAM), as a soil conditioner, on selected soil physical and hydraulic properties (infiltration rate ($f(t)$), hydraulic conductivity (HC), soil moisture content, aggregate stability (AS), and soil aggregation) was studied. Two types of anionic PAM were used: Low molecular weight (LPAM) ($1 \times 10^5 \text{ g/mol}$) with medium chargedensity (33 – 43) and high molecular weight (HPAM) ($1 - 6 \times 10^6 \text{ g/mol}$) with medium chargedensity (33 – 43). Sandy loam soil was packed into plastic columns; PAM solutions at different concentrations (100, 250, 500, and 1000 mg/L).