Irrigation Water Quality Evaluation in Jiaokou Irrigation District, Guanzhong Basin

Authors : Qiying Zhang, Panpan Xu, Hui Qian

Abstract : Groundwater is an important water resource in the world, especially in arid and semi-arid regions. In the present study, 141 groundwater samples were collected and analyzed for various physicochemical parameters to assess the irrigation water quality using six indicators (sodium percentage (Na%), sodium adsorption ratio (SAR), magnesium hazard (MH), residual sodium carbonate (RSC), permeability index (PI), and potential salinity (PS)). The results show that the patterns for the average cation and anion concentrations were in decreasing orders of Na^[] > Mg²^[] > Ca²^[] > K^[] and SO₄²^[] > HCO₃^[] > Cl^[] > CO₃^[] > Cl^[] > CO₃²=^[] > Cl^[] > CO₃^[] > F^[] > Cl^[] > Cl<sup>[

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