

Chemical composition of atmospheric precipitation on the south of Ukraine (Crimea)

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The data of long monitoring of volume and chemical content of atmospheric precipitation in steppe Crimea near to the large plantations of fruit orchards are given. The purpose of researches was detection of acid deposits, establishment of connection them with chemical structure for the operative tracking behind a condition of air. It was established, that the sum of precipitations for year was increased basically at the summer deposits. The annual volume-weighted logarithmic range of values were 4.83-5.73 in precipitation. There were more less values in a cold season than in warm one. The absolute minimum was equal 3.82. For the researched period mean values of atmospheric precipitation in a cold season gradually raised, and in warm - was reduced and has reached the minimum in 2000-2001 years. It resulted in damages of fruit plants during long term rains in vegetation period. The dominant anion in atmospheric precipitation was SO_4^{2-} , which content basically determined of them acidification. The important role in this process also belongs to ions NO_3^- and Cl^- . Mean seasons concentrations of these ions tend to increase. It, probably, may be connected both to distant distribution of emission, and with local anthropogenic activity. In connection with an establishment of atmospheric precipitation acidification and also incidental and casual phenomenon there is a necessity of their composition monitoring for agricultural areas near to the large fruit plantations for big number years during whole year.