

Water quality characteristics along the course of the Danube River.

I. The Rasova area.

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Abstract. The quality of Danube's water is, in present context, an important international problem. The Rasova village is an old settlement, in Constanta County, at 18 km from Cernavoda and 40 km from Medgidia, on the Danube River side. The paper presents original studies concerning the levels of chloride, ammonium, fluoride and metallic ions (total iron, copper and chromium), phosphorous and hardness in water of Danube River from Rasova area, in spring and autumn 2007. For most determinate parameters, the water belongs to 4th (mild) and 5th (bad) quality class (in the classification of surface water quality for assignment of ecological state of water bodies), for all sites and in both seasons studied. We consider that are two major problems with the water quality in Rasova area: (i) high concentrations of nutrients, probably due of a large quantity of organic waste sloped in the water (in the village are not water networks, sewerage networks and ecological waste storage); and (ii) high concentrations of copper, especially in spring, probably due to the agricultural treatments in a vineyards zone.

Keywords: Danube River, Rasova village, water quality, metallic ions.
