Test of Mercury (Hg) Heavy Metal Content in Water, Sediment and Fish in the waters of the Cirata Reservoir

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Cirata Reservoir is one of the multipurpose reservoirs located in West Java and is a catchment area for the Citarum River which has identified the possibility of accumulation of heavy metal mercury (Hg). This study aims to update information and monitor the content of heavy metal mercury (Hg) in water, sediment and fish in the waters of the Cirata Reservoir. This research was conducted in June 2021. The method used is descriptive analysis with sampling technique using purposive sampling method at three observation stations and analyzed using Inductively Coupled Plasma – Optical Emission Spectrometry(ICP-OES) at the Central Laboratory of Padjadjaran University. The results showed that the heavy metal content of mercury (Hg) in water, sediment and fish at the three observation stations was <0.0001 mg/L and was still below the quality standard based on the Minister of Health Regulation No. 492 of 2010, IADC/CEDA (1997) and SNI No. 7387. The environmental conditions at the time of the research with the measured parameters, namely the water temperature was in the range of 30 - 32 °C, the pH of the water was in the range of 5-6, the brightness of the water was in the range of 3,665 meters while dissolved oxygen was in the range of 1-3 mg/L. Based on the results of calculations using the STORET method that has been issued by the EPA (Environmental Protection Agency) it shows the quality status of the waters of the Cirata Reservoir is categorized in class B, which is lightly polluted. While the water conditions refer to PP No. 82 of 2001.

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