

## عنوان مقاله:

Cr VI - Removal from Wastewater by Adsorption on *Elaeagnus angustifolia* fruit powder

## محل انتشار:

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## خلاصه مقاله:

Chromium is considered as one of the important environmental pollutants due to its toxicity considered as water contaminant that may disturb metabolic activity. In the present investigation, removal of Cr (VI) using *Elaeagnus angustifolia* fruit powder has been studied. In the present study, adsorption of dissolved Chromium (VI) onto *Elaeagnus angustifolia* fruit powder has been investigated and the effect of contact time, pH value, initial concentration of dissolved Chromium and amount of adsorbent on the adsorption of Cr by the mentioned adsorbents were investigated. Results showed that the adsorption process was highly dependent on pH. Maximum Cr removal was achieved when the pH of the mixture fell within 2. Adsorption test results revealed that Cr adsorption on the studied adsorbents could be better described by Longmuir isotherm. Maximum Cr removal efficiencies were obtained by *Elaeagnus angustifolia* fruit powder 70 mg/g. Based on Cr (VI) removal efficiency it is concluded that jujube powder could be considered one of the natural and inexpensive adsorbent to remove Cr (VI) from wastewater.

## کلمات کلیدی:

*Elaeagnus angustifolia* fruit powder, Cr (VI), wastewater, isotherm model

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/274864>

