Preparation and characterization of activated coal from bitter almond shells (Prunus amygdalus) = Préparation et caractérisation d'un charbon actif à partir de la coquille d'amande (Prunus amygdalus) amère

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Date de publication : 2014

Éditeur : FAC UNIV SCIENCES AGRONOMIQUES GEMBLOUX

Description:

Description of the subject. The present study concerns the preparation of activated coal (AC) from bitter almond (Prunus amygdalus) shells (BASh), a fruit that grows spontaneously in the Setif region (northeast Algeria). Obtaining and characterizing activated coal was the valorization method adopted here.

Objectives.

The aim of this study was to elucidate the feasibility of the chemical activation of BASh in order to obtain two types of activated coal (AC).

Method.

The two ACs were obtained from BASh by acid (CAa) and basic (CAb) activation. The final products were investigated for their different physicochemical characteristics: angle of repose, ash, differential screening calorimetry, etc. In the case of CAa, the modeling of the adsorption kinetic of methylene blue (MB), as well as of adsorption isotherms, was also performed.

Results.

The activation mode seemed to affect unequally the different physicochemical

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