

研究論文

リンゴ剪定枝由来活性炭のメチレンブルー吸着に関する研究

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Properties of Methylene Blue Adsorption of Activated Carbon from Pruned Apple Branches

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A novel activated carbon was made from pruned apple branches through H₂O-activation. Its pore property and ability of methylene blue adsorption was measured by water purification, in comparison with commercial activated carbon. The results show that as the processing time for the novel activated carbon gets longer, the pore property, such as specific surface area and mesopore volume, is improved. In terms of performance of water purification, the novel activated carbon, which is processed for 120 minutes, is similar to commercial activated carbon. In addition, the ability of methylene blue adsorption is related to external specific surface area and mesopore volume of the prepared activated carbon.

Key Words : pruned apple branches, activated carbon, methylene blue, specific surface area, pore volume