Discharges from the textile industries are heavily loaded with various dyes which requires their treatment. The most common method is to adsorb on solids high surface area, for example, clay material highly available and whose leaves are good natural adsorbents. In present study we used a local bentonite available in its natural form and sodium form for the adsorption of a dye CM-3R yellow bemacid provided by BEZEMA. The evaluation of the effect of various variables is driven by a series of experiments as the contact time, initial concentration of the dye, the initial pH. The different parameters show that the adsorption of the dye is favoured to 240 min, pH 2 and a temperature of 19 °C. The sodium bentonite yielded good performance results due to the improvement of its adsorption properties. The best correlation of experimental results are obtained with the Langmuir model for sodium bentonite (R % = 0.998) and Freundlich for the raw bentonite (0997)