

Chemical Composition and Antibacterial Activity of *Ceratonia siliqua* L. Growing in Boumerdes, Algeria

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Abstract : This work is a contribution to the knowledge of physicochemical characteristics of mature carob followed by evaluation of the activity, antimicrobial phenolics leaves and green pods of *Ceratonia siliqua* L. physicochemical study shows that mature carob it has a considerable content of sugar (50.90%), but poor in proteins (7%), fat (8%) and also has a high mineral content. The results obtained from phenolic extracts of leaves and green pods of *Ceratonia siliqua* L. show a wealth leaf phenolic extract especially flavonoids (0,545 mg EqQ/g) relative to the extract of green pods (0,226 mgEqQ/g). Polyphenols leaves have a slightly inhibitory effect on the growth of strains: *Staphylococcus aureus*, *Escherichia coli*, *Klebsiella pneumoniae*, *Streptococcus sp* and *Sanmonella enteritidis*, a strong inhibitory effect on the growth of *Pseudomonas strain aerogenosa*. Moreover, polyphenols pod have a slightly inhibitory effect on the growth of *Streptococcus sp* strains, *Pseudomonas* and *aerogenosa Sanmonella enteritidis*, a slightly inhibitory effect on the growth of *Klebsiella pneumoniae* strains, *E. coli* and *Staphylococcus aureus*.

Keywords : antimicrobial activity, bacteria, clove, *Ceratonia siliqua*, polyphenols

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