

## **ACTION OF MAJOR TYPES OF COMMERCIALS CARRAGEENANS (*IOTA*, *KAPPA* AND *LAMBDA*) IN PAW EDEMA AND PLEURISIA INDUCED-CARRAGEENAN**

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The *iota*, *kappa* and *lambda* commercial carrageenans are polysaccharides from red seaweeds extensively used in food, cosmetic and pharmaceutical industry. They are composed mainly by units of sulfated galactose and 3,6 anhydrogalactose. Paw edema was induced by injecting each carrageenan solutions (0.1, 0.2, 0.5 and 1%) into the hind paw of male Wistar rats. Injections of carrageenans into the pleural cavity of rat were also used in the induced an acute inflammatory response characterized by fluid accumulation in the pleural cavity. The rats treated with kappa and lambda- carrageenans showed a volume of exudate of  $1.28 \pm 0.05$  and  $1.35 \pm 0.02$  mL and a relation of nitrite/nitrate  $25.04 \pm 0.71$  and  $33.17 \pm 0.88$  nmol respectively. The data showed high concentration of nitrite/nitrate ( $63.478 \pm 2.58$  nmoles/rat), exudates volume (1.52 mL) and PMNs ( $4902 \times 10^3$  cells) when *iota* was used. The histological analysis demonstrated that kappa and *iota* carrageenans (1%) promoted a major cellular infiltration. Thus, the results showed that the *iota*-carrageenan was the most potent inflammatory compound.

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