**Investigating the therapeutic and healing effects of tragacanth**

By

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**Statement of Problem:** Biopolymers due to their different properties and bioactivity effects such as non-toxicity, biodegradability, biocompatibility, cost-effectiveness and easy access have been used in the various industries Biopolymers are divided into different types based on their subunits, including polysaccharides, polypeptides, and polynucleotides. One of the most important polysaccharides with great therapeutic potential is Tragacanth, which is a complex, heterogeneous and anionic carbohydrate. This polysaccharide has many medicinal uses for the treatment of diabetes, cancer and constipation due to excellent physical, chemical and biological properties. Also, in traditional Iranian medicine, Tragacanth is used as a painkiller to treat sore throat and hair loss caused by oily skin.

**Research Purpose:** In this review, the therapeutic and healing effects of Tragacanth are investigated in the medical and pharmaceutical field.

**Research Method:** Related studies published in Google Scholar and Web of Science sites were searched and reviewed. Studies were reviewed in which only the uses and properties of katira were reported. Finally, the results were analyzed using the required software.

**Results and Conclusion:** In the present study, the benefits of Tragacanth and its effect in the treatment of diseases were investigated. In general, this natural polysaccharide is used for diarrhea and constipation. Tragacanth is effective in wound regeneration and healing due to its ability to bind to fibroblast. The active ingredients in Tragacanth (Tragacanthin and Basorin) quickly help collagen production and wound healing. In addition to wound healing and antimicrobial properties, Tragacanth has the ability to control drug releases from drug delivery systems. This natural polysaccharide has also shown good results in drug encapsulation. Therefore, taking into account that Tragacanth plant has many properties and uses and the polysaccharide is safe, its use is recommended.

**Keywords:** Tragacanth, Wound healing, Antimicrobial, Biopolymer.