



Product : Tragacanth Gum
Version : No 5. (13/05/2024)
Origin : IRAN

Phaidyme Herbs Company

SAY NO TO MEDIOCRITY and YES TO EXCELLENCE





WHY IS IRAN CONSIDERED TRAGACANTH GUM'S CRADLE?

To answer this question, we should consider different types of Astragalus in Iran.

The Astragalus genus has nearly **800 species** in Iran. Some of these species are thorny and the rest are herbaceous species, often fodder. Also, nearly 400 of these species are unique to Iran.

TRAGACANTH GUM-PRODUCING ASTRAGALUS

Section platonychium –

In this section, I will mention some of the Astragalus that produce Tragacanth Gum and are in Section “Platonychium”.

Row	Species
1	Astragalus echidna Bunge
2	Astragalus echindaeformis Sirjev
3	Astragalus floccosus Boiss.
4	Astragalus gossypinus Fischer
5	Astragalus hypsogeton Bunge
6	Astragalus longistylus Bunge
7	Astragalus meschedensis Bunge
8	Astragalus microcephalus Willd.
9	Astragalus myriacanthus Boiss.
10	Astragalus verus Olivier

They are among the most famous Astragalus that produce Tragacanth Gum.



Section Rhacophorus –

In special cases, local people also extract Tragacanth Gum from the species of “Rhacophorus” with the following names.

Row	Species
1	Astragalus andalanicus Boiss. & Hausskn.
2	Astragalus compactus Lam.
3	Astragalus globiflorus Boiss.
4	Astragalus pycnocephalus Fischer

Section Brachycalyx –

The species of Section “Brachycalyx” are more or less Tragacanth Gum producers.

I will mention their names below.

Row	Species
1	Astragalus albispinus Sirj & Bornm.
2	Astragalus caspius Bieb.
3	Astragalus adscendens Boiss. & Hausskn.

THE MOST COMMON TRAGACANTH GUM-PRODUCING ASTRAGALUS SPECIES IN IRAN

Tragacanth is a generic name for the Tragacanth Gum.

In Iran, Tragacanth Gum extracted from two different Astragalus species is more common than Tragacanth Gum extracted from other Astragalus species.



These two types of Astragalus species are:

1. White (cotton, oyster) sedum with scientific name:

Astragalus gossypinus Fischer

2. Yellow Tragacanth Gum with scientific name:

Astragalus verus Olivier

CLASSIFICATION OF TRAGACANTH GUM BASED ON

Tragacanth Gum is classified based on the type of tool used to extract the Tragacanth Gum from the Astragalus plant and also the way of making the scratch.

While natives in each of the regions of Iran where Tragacanth Gum is harvested give different names to this gum, in general, Tragacanth Gum is categorized into 3 types as follows.

“Flake” Tragacanth Gum

The finest gum which has been exuded from the long incisions dries almost white in color and in flakes and is known as “flake” Tragacanth, being graded according to appearance.

Most of the Tragacanth Gums produced in Iran are of the “flake” type.

“Vermicelli” Tragacanth Gum

A “Vermicelli” Tragacanth Gum is released by inserting a nail into the stem of Astragalus, and which dry in tears or vermiform pieces.

The shape of this type of Tragacanth Gum can be round or angular depending on the cross-section of the nail. This method for extracting is very limited because it is difficult to harvest the gum of Tragacanth Gum in this way.



“Hog” Tragacanth Gum

“Hog” Tragacanth Gum oozes out due to the impact of hard and large objects such as picks, axes, and wounding in the plant.

This type of Tragacanth Gum is in the form of tear-shaped pieces and may get mixed with dust and debris, resulting in poor quality.

TRAGACANTH GUM USES

Row	Use
1	BINDING
2	EMULSION STABILISING
3	FILM FORMING
4	MASKING
5	VISCOSITY CONTROLLING

TRAGACANTH GUM INGREDIENTS

Tragacanth Gum includes the following ingredients:

Parameters	Amount/Percentage
Water	10 - 15
Minerals	3 - 4
Starch	3

Usually, 60 to 70% of Tragacanth Gum is not soluble in water. But by absorbing moisture, it becomes a sticky glaze. For this reason, starch particles can be seen inside.



Minerals of Tragacanth Gum mainly include the following:

Full name of the compound	Scientific symbol
Phosphorus	P
Nitrogen	N
Potassium	K
Calcium	Ca
Sodium	Na

In general, there are 2 types of effective ingredients in Tragacanth Gum which are significant:

Compound's name	Amount/Percentage	Details
Tragacanthin	20 - 30	Soluble in water
Bassorin	60 - 70	Insoluble in water, especially in cold water

Note: In high-quality Tragacanth Gum, the amount of Bassorin should not be less than 60%.

Tragacanthin

Tragacanthin is composed of Uronic acid linked to several molecules of Arabinose sugar.

Bassorin

Bassorin (Tragacanthic acid) consists of D-Galacturonic acid connected to d-galactose and d-xylose sugars.

Chemically, Tragacanth Gum is a mixture of a number of polysaccharides. The molecular weight of Tragacanth Gum is 840 kDa.

The color of the gum produced by the Astragale plants ranges from white to yellow and even red. In some cases, red gum is secreted from rare bushes among the Astragalus for an unknown reason.

Tragacanth Gum is generally composed of calcium, magnesium, and potassium salts.

Unlike other gums, it retains its viscosity for a long time when dissolved in water.



PRICE INQUIRY AND PURCHASE

To inquire about the price of Tragacanth Gum, please send us a Letter of Intent (LOI) on your company letterhead. Make sure to include the requested information below accurately in your LOI.

The commercial department of Phaidyme will review your Letter of Intent (LOI), and they will respond to your email in less than **24 hours**.

Commercial Department Email: info@phaidyme.com

The required information for price inquiry:

- Intended use
- The best price for you (per kg) according to the Viscosity Range you need
- Viscosity range (CPS)
- The formula used to calculate the viscosity
- Spindle type
- The exact amount required
- Location and Incoterms of cargo delivery (sales term)
- Your desired packaging (type and weight)
- The documents required for customs clearance in the destination country

We have fully introduced the Tragacanth Gum product of Phaidyme Company; Click the button below to read:

Tragacanth Gum - Click