

BriteSite

Eye Drops

Introduction:

There are 84 disorders of eye as a broad classification. They start from amblyopia, ARMD, blepharitis to vitreoretinopathy, xerophthalmia; virtually starting with each alphabet. Even if the disorders are 84, they could be categorized according to 4 types of pathological events:

- a] Inflammation
- b] Infection
- c] Free radical damage and
- d] Decreased local immunological potential.



The existing topical medications provide a number of drugs with anti-inflammatory and antimicrobial activity, but there is definite need to provide topical antioxidant support to the eye, which could enhance the local immunity factors in addition to earlier described effects.

The practice of use of herbal drugs in the treatment of eye ailments dates to the days of Rigveda, Bhrgutantra, Asvini Kumara, Charak Samhita and Sushrut Samhita. The W.H.O. has also recognized the importance of herbal cures and has been active in creating guidelines and standards of botanical medicine. Various experimental in-vitro and animal studies have established the therapeutic effect of medicinal plants in ophthalmic disorders. These studies have proved the effects of medicinal plants in two aspects:

- a] Therapeutic effects for cure of eye disorders of infective, allergic and inflammatory etiology;
- b] Prophylactic: in degenerative disorders such as ARMD, diabetic cataract.

BriteSite eyedrops is specifically formulated to preserve and protect eyes in patients of all ages. BriteSite eyedrops is a unique preparation offering 4-prong effects to the eye. The ingredient rationale of BriteSite is based on scientific research of the therapeutic action of medicinal plant extracts.

Composition:

Aqueous extracts of (in v/v)

No.	Ingredient	Latin Name	Active ingredient	Composition
1.	Haridra	Curcuma longa	Curcumin	12.00%
2.	Yashtimadhu	Glycyrrhiza glabra	Glycyrrhizin, Glabridin	10.00%
3.	Pippali	Piper longum	Piperine	5.00%
4.	Bibhitak	Terminalia chebula	Gallic acid	5.00%
5.	Dhanyak	Coriander sativum	Coriandrol	10.00%
6.	Rasanjan	Berberis aristata	Berberine	5.00%
7.	Bhuiamla	Phyllanthus niruri	Phyllanthin	5.00%
8.	Shirish	Albizzia lebbeck	Albizziahexocide	5.00%
9.	Tulsi	Ocimum sanctum	Eugenol	5.00%
10.	Palash	Butea frondosa	Butin, butrin	5.00%
11.	Nirgundi	Vitex negundo		3.00%
12.	Satapatri	Rosa damascena	Citranool	15.00%
13.	Madhu	Honey	Quercetin	15.00%

Pharmacology:

The ingredients of BriteSite could be categorized into four classes according to their mode of action:

- 1. Anti-inflammatory** – Curcuma longa, Glycyrrhiza glabra, Piper longum, Berberis aristata, Phyllanthus niruri, Albizzia lebbeck, Ocimum sanctum, Vitex negundo, Butea frondosa, Rosa damascena, Honey
- 2. Antimicrobial** – Curcuma longa, Glycyrrhiza glabra, Piper longum, Terminalia chebula, Coriandrum sativum, Berberis aristata, Albizzia lebbeck, Ocimum sanctum, Vitex negundo, Butea frondosa, Rosa damascena, Honey
- 3. Antioxidant** – Curcuma longa, Glycyrrhiza glabra, Piper longum, Terminalia chebula, Coriandrum sativum, Phyllanthus niruri, Ocimum sanctum, Vitex negundo, Rosa damascena, Honey
- 4. Immunomodulatory** – Curcuma longa, Glycyrrhiza glabra, Piper longum, Coriandrum sativum, Berberis aristata, Phyllanthus niruri, Albizzia lebbeck, Ocimum sanctum, Honey

Some of the key findings about BriteSite ingredients are as follows:

Berberis aristata - conjunctival scrapings of patients receiving the berberine chloride eye drops were negative for *C. trachomatis* and there were no relapses, even one year after treatment. ¹

Curcuma longa - The results indicate that turmeric and curcumin are effective against the development of diabetic cataract. Further, turmeric may be explored for anticataractogenic agents that prevent or delay the development of cataract. ²

Glycyrrhiza glabra: Glycyrrhizin [Yashtimadhu] in a 5% solution showed a comparable anti-inflammatory effect to that of dexamethasone (0.1%). ³

Phyllanthus niruri: P. niruri is able to modulate the immune system, via proliferation and activation of T- and B-lymphocytes, activation of the complement system, activation of phagocytic cells such as macrophages and monocytes, as well as increase of cytotoxic cells such as the Natural Killer cells.⁴

Ocimum sanctum: The extracts from the leaves of Ocimum sanctum showed better activity against the three MRSA strains.⁵

Ocimum sanctum: OS possesses a significant anticataract activity in vitro and its anticataract potential could be related with its AR inhibitory effect.⁶

Rosa damascena: Rose water obtained from petals of Rosa damascena is known for its soothing effect and also found to be beneficial in ophthalmopathy⁷

Honey: In eye research, flavonoids have been reported as anticataract agents in vivo and vitro because of their osmotic protection as inhibitors of aldose reductase.⁸

Coriander sativum: The daily use of coriander fruits in various forms is very common in India and the present study revealed strong antioxidant activity of coriander extracts that was superior to known antioxidant ascorbic acid and indicate its intake may be beneficial.⁹

Butea frondosa: The findings reveal statistically significant differences ($P < 0.05$) between the arkas of the Butea frondosa and the commercial eye drop of Flurbiprofen.¹⁰

Thus, BriteSite eye drops are specifically designed to counter all 4 aforesaid pathological events and hence are useful in the treatment as well as prevention of eye diseases.

Therapeutic effects:

BriteSite eyedrops is an absolutely sterile solution having 13 purified plant extracts having antioxidant and nutritional properties.

It has an immediate cooling & soothing effect on the eye, which persists even after 30 minutes of the instillation.

BriteSite eye drops do not cause any stinging and burning even in irritated eyes.

BriteSite eye drops protects eyes from pollutants such as dust, smoke, fumes as well as occupation related disorders like Computer Vision Syndrome etc.

BriteSite eye drops is boosted with natural anti-inflammatory herbs like Palash, Haridra; hence, is useful in the inflammatory conditions of the eye.

Rosa damascena in BriteSite has a unique anti-solar effect, which protects the eyeball from harmful effects of the sunlight.

The use of honey as an ophthalmic antioxidant is very well accepted even in western countries. Honey is a great source of trace nutrients like Folate, Vit. C,



Vit. B, sodium, potassium, phosphorus, selenium, zinc, magnesium, manganese and copper etc.

Daily instillation of BriteSite eye drops provides nutrition to the components of the eyeball and is beneficial to maintain eye health.

INDICATIONS:

BriteSite eye drops is indicated for

- Eye strain due to
 - Excessive computer usage,
 - Pollution
 - Dust,
 - Smoke
 - Foreign bodies etc.
- Inflammatory conditions of the eye due to
 - Infection
 - Allergy
 - Injury
 - Use of eye cosmetics
- Maintenance of clear vision in healthy eyes
- Supportive therapy for the treatment of
 - Dry eyes
 - Age-related Macular Degeneration
 - Cataract
 - Conjunctivitis allergic, bacterial and viral
 - Post-operative care

DIRECTIONS FOR USE:

To maintain eye health: 1 drop in each eyes twice daily.

For other eye conditions: 1 drop in the affected eye up to 4 times a daily or as directed by the physician.

STORAGE:

BriteSite eye drop should be stored in a cool dark place. The container should be closed tightly after the use.

PACKING:

BriteSite eye drops are available in 10 ml container sterilized by Gamma Irradiation.

Reference:

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