

**REVIEW: POTENSI ANTIGLAUKOMA DARI BERBAGAI
BAHAN ALAM TERHADAP TEKANAN INTRAOKULAR
(TIO) MATA**

SKRIPSI

Sebagai salah satu syarat untuk memperoleh gelar Sarjana Farmasi

**SRI HANTIKA
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**SEKOLAH TINGGI FARMASI INDONESIA
YAYASAN HAZANAH
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2021**

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BAHAN ALAM TERHADAP TEKANAN INTRAOKULAR
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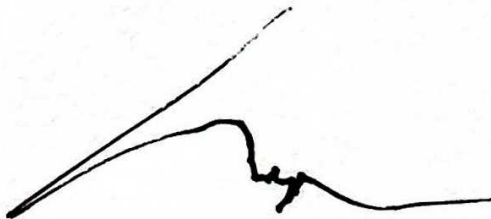
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Kutipan atau saduran baik sebagian ataupun seluruh naskah, harus menyebut nama pengarang dan sumber aslinya, yaitu Sekolah Tinggi Farmasi Indonesia

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ABSTRAK

Glaukoma merupakan kondisi tekanan intraokular (TIO) mata seseorang menjadi tinggi pada hasil pengukuran tonometer yaitu >20 mmHg. Penyebab glaukoma terjadi karena terganggunya aliran cairan mata di dalam bola mata. Pasien glaukoma mendapatkan terapi pengobatan seumur hidup yang akan meningkatkan resiko terjadinya efek samping obat, sehingga beberapa peneliti mencari sumberlain yang mempunyai potensi antiglaukoma dari beberapa bahan alam. *Review* ini bertujuan untuk memberikan informasi kepada masyarakat dan peneliti terkait beberapa bahan alam yang memiliki aktivitas antiglaukoma terhadap penurunan TIO sehingga dapat dijadikan referensi untuk pengobatan ataupun pengembangan dalam membuat obat antiglaukoma yang berasal dari bahan alam. Metode yang digunakan adalah *true eksperimental* dan studi literatur. Literatur yang digunakan yakni jurnal nasional yang terindeks SINTA, jurnal internasional terindeks *Scopus* yang diterbitkan 10 tahun terakhir (2011-2021). Penelusuran Pustaka dilakukan secara online melalui jurnal yang terdapat pada *Google scholar*, PubMed dan *Science direct*. Berdasarkan hasil *true eskperimental* dan studi literature diperoleh telur keong mas (*Pomacea canaliculata*) dan 15 bahan alam lainnya memiliki aktivitas sebagai antiglaukoma dengan kandungan *chemical constituent* yang diduga berkhasiat yaitu alkaloid, flavonoid dan saponin. Pada pemberian topikal kuncup bunga tulip (*Spathodea campanulata*) dan oral daun sambung nyawa (*Gynura procumbens* L.) memiliki persentase penurunan IOP tertinggi dibandingkan bahan alam lainnya.

Kata Kunci: antiglaukoma, bahan alam, senyawa konstituens kimia, tekanan intraokular, tonometri.

ABSTRACT

*Glaucoma is a condition where the intraocular pressure (IOP) of a person's eye becomes high on the results of the tonometer measurement, which is > 20 mmHg. Glaucoma is caused by the disruption of the flow of eye fluid in the eyeball. Glaucoma patients receive lifelong medication therapy which will increase the risk of drug side effects, so some researchers have found other sources that have antiglaucoma potential from several natural materials. This review aims to provide information to the public and researchers regarding several natural ingredients that have antiglaucoma activity against IOP reduction so that they can be used as references for treatment or development in making antiglaucoma drugs derived from natural ingredients. The method used is true experimental and literature study. The literature used is SINTA indexed national journals, Scopus indexed international journals published in the last 10 years (2011-2021). Library searches are carried out online through journals found on Google Scholar, PubMed and Science direct. Based on experimental results and literature studies, it was found that golden snail eggs (*Pomacea canaliculata*) and 15 other natural materials have antiglaucoma activity with chemical compounds that are thought to be efficacious, namely alkaloids, flavonoids and saponins. The topical administration of Tulip Flower Buds (*Spathodea campanulata*) and oral administration of *Gynura procumbens* L. had the highest percentage of IOP reduction compared to other natural materials.*

Keywords: *antiglaucoma chemical constituents, intraocular pressure, natural material, tonometry.*

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Penulis

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DAFTAR SINGKATAN

- WHO = *World Health Organization*
- TIO = *Tekanan Intraokuler*
- IOP = *Intraocular Pressure*
- ROS = *Reactive Oxygen Species*
- HTM = *Human Trabecular Meshwork*
- POAG = *Primary Open Angle Glaucoma*
- RGC = *Retina Ganglional Cells*
- TNF- α = *Tumor Necrosis Factor Alpha*
- FEC = *Fraction Enrich Capsanthin*
- BCACs = *Blackcurrent Anthocyanins*

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