

# MEDICINAL PLANTS AS POTENTIAL ANXIOLYTIC AGENTS: A COMPREHENSIVE REVIEW OF HERBAL THERAPIES FOR ANXIETY

SAPKAL V. H.<sup>1</sup>, ANDHALE S.B.<sup>2</sup>, GHUBE D. D.<sup>3\*</sup>, TATHE P R<sup>4</sup>

<sup>1</sup>Research Scholar, Department of Pharmacology, Samarth College of Pharmacy, Deulgaon Raja, Dist. Buldhana-443204, Maharashtra, India

ORCID ID : 0009-0007-4468-0633

<sup>2</sup> Assistant Professor, Department of Pharmacology, Samarth College of Pharmacy, Deulgaon Raja, Dist. Buldhana - 443204, Maharashtra, India

ORCID ID : 0009-0008-4773-9722

<sup>3\*</sup>Head of the Department, Department of Pharmacology, Samarth College of Pharmacy, Deulgaon Raja, Dist. Buldhana-443204, Maharashtra, India

ORCID ID : 0009-0001-8012-0736

<sup>4</sup>Principal, Samarth College of Pharmacy, Deulgaon Raja, Dist. Buldhana-443204, Maharashtra, India

ORCID ID : 0000-0003-2163-2974

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## ABSTRACT

Anxiety disorders represent one of the most prevalent mental health challenges worldwide. Feeling anxious occasionally is a normal experience and typically passes quickly without affecting everyday activities. However, when anxiety continues over a long period, it may indicate an underlying health condition. Cause serious distress and negatively affect a person's quality of life.

Although commonly prescribed and effective, anxiolytic treatments such as benzodiazepines and selective serotonin reuptake inhibitors (SSRIs) are associated with adverse effects, including sedation, dependence, withdrawal complications, and a slow therapeutic onset. We need, safer and more palatable substitutes made from medicinal herbs are becoming more popular. This study examines the anxiety-reducing effects of traditionally used herbal plants through a detailed review of existing preclinical and clinical research.

A variety of medicinal plants have demonstrated anxiety-relieving activity by acting on neurotransmitter pathways like GABA, serotonin, and dopamine alongside antioxidant and anti-inflammatory effects. Building on the concept of synergistic interactions, polyherbal formulations have likewise produced promising results in reducing anxiety-related symptoms. Overall the reviewed evidence suggests that herbal treatments could represent safer and potentially more effective alternatives for the management of anxiety.

**Keywords:** Anxiety, anxiolytic activity, medicinal plants, herbal medicine.

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## RATIONALE OF THE STUDY

Anxiety is associated with an imbalance of neurotransmitters, past experiences, biological factor like genetic, overthinking, stress. This study brings together evidence on the biochemical mechanisms and clinical effects associated with herbal treatments used in managing anxiety disorders.

The impact of various herbal remedies on neurotransmitter systems, stress hormones, and neuroendocrine pathways is covered, along with

possible side effects and combinations with prescription drugs. Additionally, the article emphasises the therapeutic significance of standardised formulations and suitable dosage in enhancing the effectiveness and safety of herbal treatment for anxiety.

## INTRODUCTION

The world health organization describes mental health as a state of emotional and psychological well-being that enables individuals to meet the demands of everyday life, function in society, use their cognitive and

emotional abilities effectively, and develop fulfilling, mature relationships. It also comprises the ability to adjust to both internal problems and external situations, as well as to productively engage in social development.

Anxiety is a mental disorder characterized by exaggerated fear or worry beyond the real situation. As the anxiety are related feeling anxious, fear and lack of concentration. One of the most prevalent stress-related mood disorders.[1] A number of pertinent neurophysiological processes, such as anxiety and sleep, are linked to the GABA system, and disruptions in GABA modulations result in a variety of neurological and psychological conditions, including anxiety. Glycine is primarily associated with atonic sleep rather than rapid eye movement (REM) sleep, whereas adenosine promotes non-rapid eye movement (NREM) sleep when active in the peptic area and hypothalamus. During REM sleep, increased anticholinergic activity highlights the essential role of acetylcholine (ACh). In contrast, stimulation of brainstem nuclei suppresses REM sleep through the inhibitory action of serotonin (5-HT). Additionally, melatonin secreted in the absence of light plays a key role in regulating circadian rhythms and sleep wake cycles.[2]

Anxiety disorder can cause disability and premature death of patient. anxiety are different type like, people with anxiety, particularly generalised anxiety disorder. Insomnia is one of the nonspecific somatic symptoms that patients with GAD frequently exhibit .According to current scientific and medical research, maintenance sleep insomnia and, to a lesser extent, early sleep insomnia are the sleep disorders associated with mild-to-moderate GAD . Excessive worry and other physiological symptoms, such as tense muscles, restlessness, and insomnia, are the hallmarks of generalised anxiety disorder (GAD).[3]

panic disorder, social anxiety etc. we identify the anxiolytic major compounds from herbal plant, showed

strong binding to GABA receptors SSRRI, various synthetic drug (diazepam) show dependency, sedation this adverse effect on person.

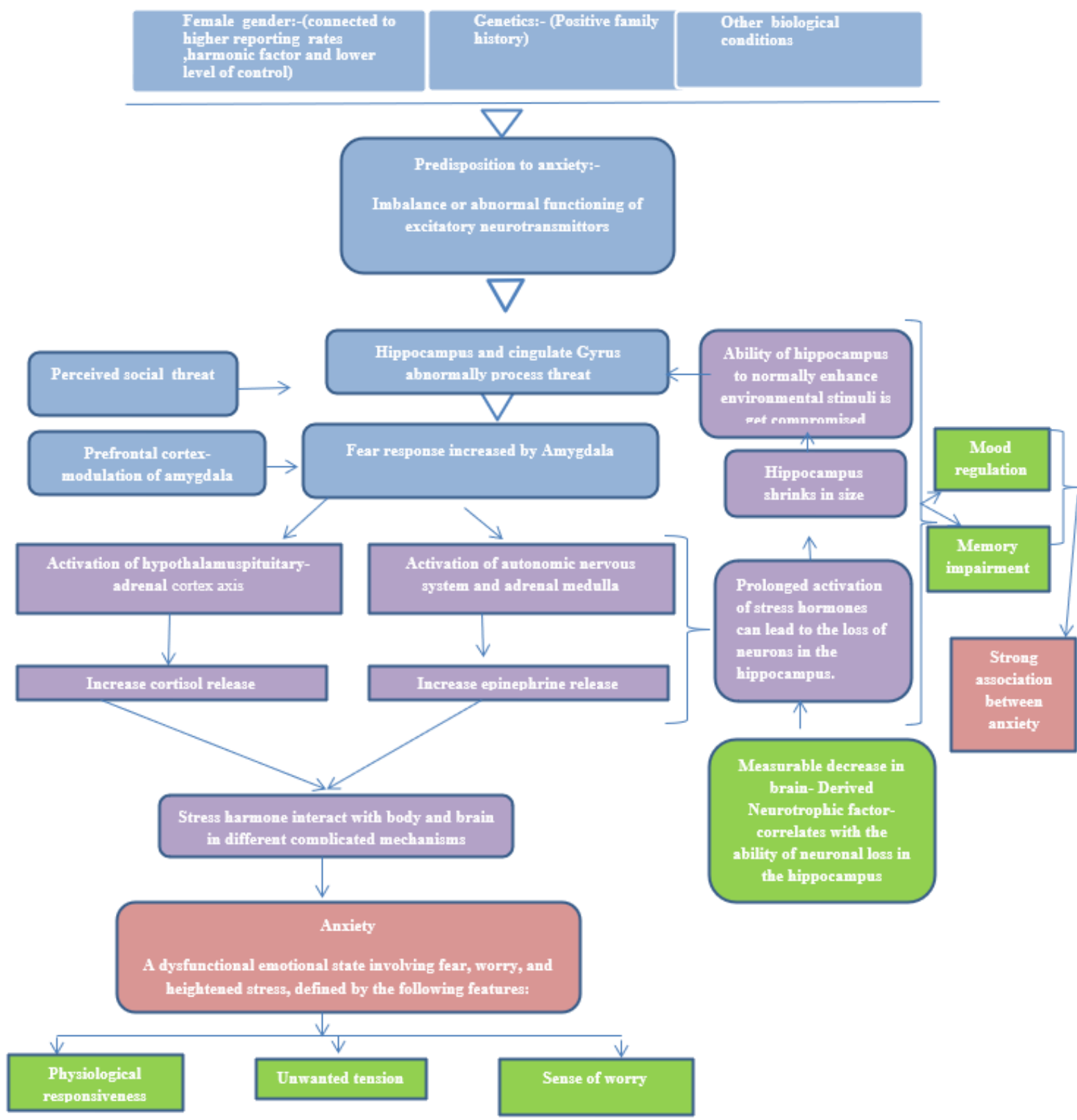
A long-standing concept in ayurveda and traditional medicine, polyherbalism is predicated on the idea that combining herbs with complementary actions produces better therapeutic benefits than a single agent, simultaneously addressing oxidative stress, modulating neurotransmitter systems, and reducing inflammatory reactions. Carefully A long-standing concept in ayurveda and traditional medicine, polyherbalism is predicated on the idea that combining herbs with complementary actions produces better therapeutic benefits than a single agent, simultaneously addressing oxidative stress, modulating neurotransmitter systems, and reducing inflammatory reactions. Particularly designed polyherbal mixtures may be used as multiple-acting treatments for anxiety, according to recent preclinical research. This approach is used in the current study, which employs three plants with established neuroprotective qualities: *passiflora incarnate, nigella sativa, bacopa monnieri.....etc*

#### PREVALENCE

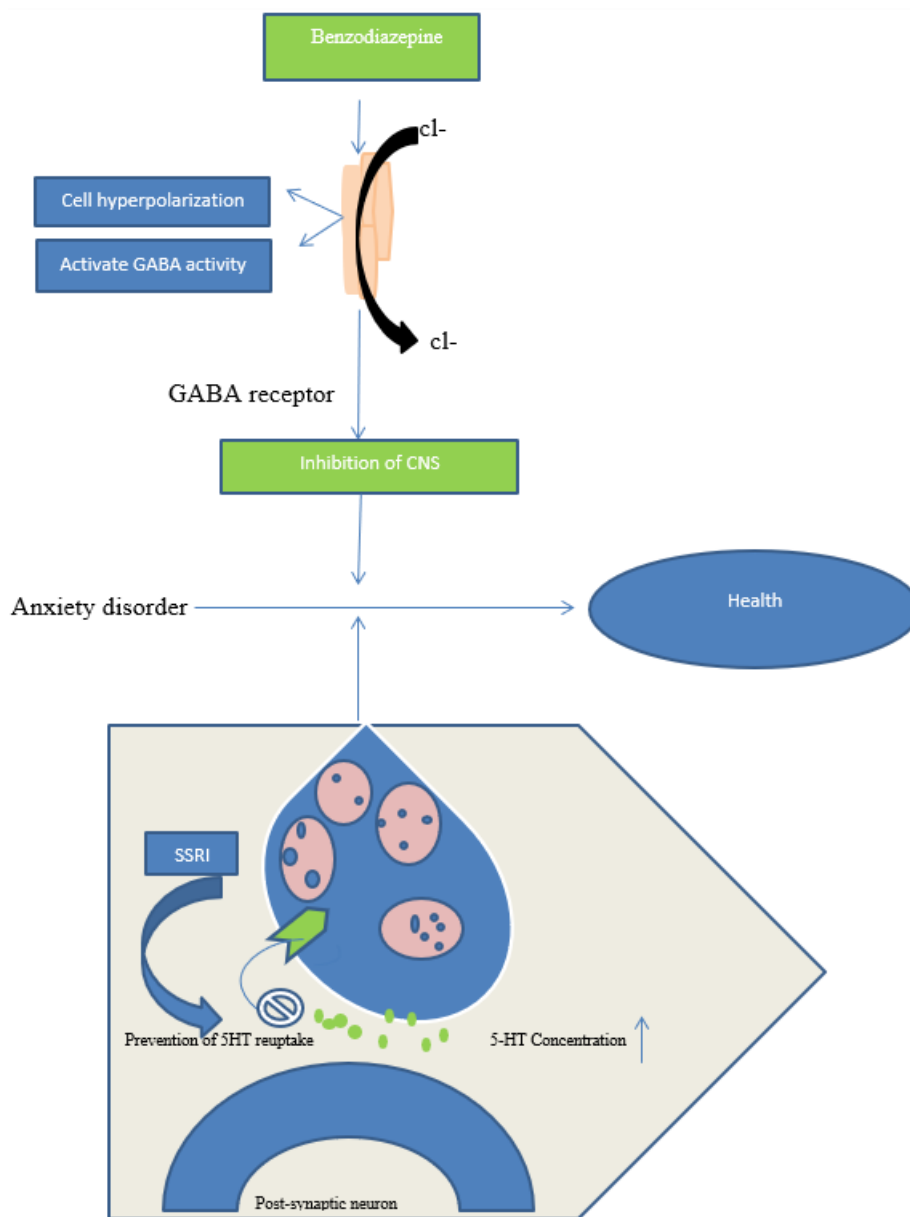
Anxiety disorders affect approximately 15–20% of the global population, making them one of the most common mental health conditions. Affecting individual of all age group. They are frequently misdiagnosed, particularly in those with long-term health issues. For instance, screening trials for Parkinson's disease reveal that a large number of patients have severe anxiety symptoms.[4]

People with anxiety disorders are also at an increased risk for various health problems, such as an increased risk of myocardial infarction, according to large population-based research with over 500,000 participants.

**Pathogenesis**



### General Mechanism Of Action Of Anxiety



### Plant Species with Anti-Anxiety Properties

Anxiety is a prevalent mental disorders. Numerous antianxiety medications are available, but these anxiolytic medications such as benzodiazepines and SSRIs have serious drawbacks, such as drowsiness, dependence withdrawal, delayed onset of action, and unfavourable side effects include weight gain and emotional blunting. We have selected numerous

medicinal plants that have been used as traditional medicine for long time, due to the need for safer, natural alternatives is crucial. These plants have qualities like calm, pharmacological investigation, which evaluates the anxiolytic efficiency in clinical and preclinical context, while historical treatment and ethanobotanical records suggest its use for anxiety-related symptoms. These plants are as follows:

**Table no.1 of Plant Species with Anti- Anxiety Properties:**

Sr no	Name of plant	Common name	Part of plant	Extraction	Active constituent	MOA	Dose	LD50	Reference
1	Bacopa monnieri	Brahmi	Aerial plant.	Aqueous	saponin, bacoside A and B,	Bacopa includes active substances with anti-inflammatory qualities, such as alkaloids and bacosides. These substances promote a change towards an anti-inflammatory microglial response and lower the release of pro-inflammatory cytokines. Bacopa may shield brain cells and reduce anxiety brought on by inflammation through these processes	-	-	5
2	Matricaria chamomilla	chamomilla	flower	Hydro-alcoholic	apigenin-7-glucoside, caffeic acid, luteolin, rutin, cynaroside, and apigenin	Binding of GABA <sub>A</sub> benzodiazepine receptor (Apigenin) reduce anxiety	25–100 mg/kg.	>2000 mg/kg	6,7,8
3	Caesalpinia pulcherrima leave	Caesalpinia pulcherrima leave	leaves	methanol	β-sitosterol, pulcherrimin, lupeol, lupeol acetate, myricetin, terpenoids, quercetin and rutin, flavonoids, and steroids	Caesalpinia pulcherrima's anti-anxiety properties were assessed using a commonly utilised model, namely	200mg/kg	5000mg/kg	9
						increased plus-maze and locomotor activity.			
4	Passiflora incarnata	Passionflower	Aerial	Methanolic	Apigenin, vitexin, isovitexin	GABA receptor-mediated biochemical processes are responsible for the anxiolytic and sedative effects of P. incarnata	10mg/kg	-	10
5	Valeriana officinalis	Valerian	root	Aqueous	Valerenic acid, valerenol	Valeriana officinalis primarily modulates GABA <sub>A</sub> receptors, increasing GABAergic neurotransmission that is inhibitory. Reduced neuronal excitability from valerenic acid's inhibition of GABA breakdown and enhancement of GABA release. Adenosine receptor activation and slightly serotonergic modulation are additional actions that contribute to sedation and anxiolytic	-	-	11
						Increasing	200mg/kg	2000mg/	12

6	Tinosporia cardifolia	Tinosporia cardifolia	leaves	Ethanolic	Guduchi	inhibitory neurotransmission mediated by GABA A receptors, which calms the central nervous system.		kg	
7	Withania somnifera	Ashwagandha	leaves	Aqueous	glycowithanolides	By reducing neuroinflammation and neuronal apoptosis, re-establishing neuroimmune balance, and safeguarding brain cells via anti-apoptotic and anti-stress signalling systems, Withania somnifera decreases anxiety caused on by sleep loss.			13,14
8	Nuclea latifolia	Nuclea latifolia	Root	Aqueous	Nauclefidine,nauclefine	Anxiolytic activity.	50-200mg/kg	2000mk/kg	15,16
9	Nigella sativa	Black cumin	Seed	Methanolic	Thymoquinone	GABAergic serotonergic (5-HT) modulation, and potent antioxidant action all contribute to the anxiolytic effect; thymoquinone lowers oxidative stress and modifies	20-400mg/kg	>2000mg/kg	17

						stress-related neurotransmission.			
10	Cinnamon	Cinnamon	Bark	n-hexane	Cinnamon aldehyde's(essential oil)	Due in large part to cinnamonaldehyde's influence on important anxiety-related genes including Fos, Egr2, and Dec as well as neurological pathways, cinnamon helps alleviate anxiety by reducing inflammation in the brain, protecting neurones, and normalising stress-related brain activity.	5% -10%v/v essential oil administered via (inhalation)	-	18
11	Cuminum cyminum	Cumin	Seeds	Ethanol	Cumin aldehyde	GABA A receptor modulation (benzodiazepine site)	200mg/kg	-	19
12	Albizia Julibrissian	Silk tree	Stem,bark	Aqueous	Syringaresnol-4-O-β-D-apiofuranosyl-(1 2)-β-D-glucopyranoside	Reduces the activity of the HPA axis (CRF, ACTH, corticosterone) and	3-6mg/kg	-	20

						modifies monoaminergic neurotransmitters in the hippocampus and cerebral cortex to provide an anxiolytic effect.			
13	sonchus oleraceus	Sow thistle	Aerial	Hydro-ethanolic	Luteolin-7-glucoside, apigenin-7-glucuronide, and taraxasterol	anxiolytic-like action	30-300mg/kg	-	20
14	Uncaria rhynchophylla	Gou teng	Stem	Aqueous	Rhynchophylline, Isorhynchophylline, Hirsutine, and Hirsuteine	anxiolytic-like action by activation of the 5-HTA receptor in the serotonergic nervous system.	200mg/kg	-	21
15	Bryophyllum pinnatum	Kalanchoea pinnata	leaves	ethanolic	Flavonoids-quercetin	- By increasing GABA-mediated inhibitory activity in the brain, bryophyllum pinnatum leaf extract lowers anxiety.			22
16	Ceropia glazioui	Embauba	Leaves	Aqueous	Flavonoids ,terpenes	Anxiolytic-like action may be caused by calcium channel blocking or the participation of the serotonergic (5-HT).	25-100 mg/kg	-	23
17	Magnolia obovata	Magnolia	Leaves	Ethanol	Honokiol, magnolol	Anxiety is reduce by Magnolia	25-50 mg/kg		24
						obovata leaf extract via improving GABA A The receptor activity, which enhances inhibitory signalling in the brain, and by lowering neuroinflammation by inhibiting inflammatory cytokines and microglial activation.			
18	Eschscholzia californica	California poppy	Aerial	Aqueous	-	By altering the GABA-A receptor complex benzodiazepine receptors, Eschscholzia californica enhance inhibitory neurotransmission in the central nervous system, which has anxiolytic and sedative activity.	25-50 mg/kg	>5000m g/kg	25
19	Annona cherimolia	Custard apple	Leaves	Hexane extract	palmitone $\beta$ -Sitosterol	By increasing GABA-mediated inhibitory activity in the brain, Annona cherimolia leaf extract lowers anxiety.	10ml/kg(I.P)	>1000m g/kg	26

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20	Rubus Brasiliensis	Wild blackberry		Ethanol	Flavonoid	The rubus brasiliensis is responsible for the anxiolytic activity, acting via the GABAA A	150mg/kg		27
21	Apocynum venetum	Luobuma	Leaves	Ethanol	Isoquercitrin	Apocynum venetum's, anxiolytic-viz., action is mostly formed by the GABAergic system, with 5-HT1A receptors playing a minor role.	30mg/kg	-	28
23	Equisetum arvense	Horsetail	Stem	Ethanol	Apigenin	Modulation of the GABA <sub>A</sub> receptor (benzodiazepine site)	50-100mg/kg		29
24	Tilia sp(Americana var)	Linden	flower	Aqueous	Flavonoid ( quercetin)	-	100-300mg/kg	5000mg/kg	30
25	Achillea millefolium	Yarrow	Aerial	Aqueous	Apigenin,Luteolin,quercetin,	-			31
26	Leea indica	Bandicoot berry	Leaves	Methanol	Flavonoids(quercetin,myricetin)	By increasing GABAergic inhibition, Leea indica leaf extract exhibits anxiolytic effects through CNS depression increases the amount of sleep	200mg/kg		32

						brought on by thioipental (GABAA receptor allosteric regulation). decreases CNS excitability, which in turn decreases locomotor activity.			
27	Corandrum sativum	Coriander	Seed	Hydro-alcoholic	linalool	-	50-200mg/kg	4.13 g/kg	33
28	Turnera Diffusa	Damiana	Leaves	Ethanol	Flavonoids(gonzalitosin)	GABA <sub>A</sub> is positively modulated to provide anxiolytic effects similar to those of diazepam. receptors without inducing drowsiness. The extract's antidepressant effect is also attributed to its enhancement of serotonergic (5-HT) neurotransmission. Furthermore, mood control is supported by nitric oxide-cGMP pathway activation. In general, it has an adaptogenic effect, restoring normal stress responses without depressing the central nervous system.		>5000mg/kg	34

29	Euphobia hirta	Tongkat ali	Leaves	Ethanolic	pentadecylic acid, ethyl linoleate, phytol, 9,12,15-octadecatrien-1-ol,	Reduction of oxidative stress and inflammation, regulation of the NO-iNOS pathway, and restoration of stress-related neurotransmission (possibly GABAergic participation indirectly via antioxidant and anti-inflammatory actions) all contribute to the anxiolytic effect.	100-200 µg/100 µL	>2000mg/kg	35,36
30	Crocus sativus	Saffron	Stigma	-	Safranal, picrocrocin, crocin, and crocetin	GABAergic regulation, improved serotonergic (5-HT) transmission, and antioxidant action	30-80mg/kg	>5000mg/kg	37
						all promote anxiolytic activity; safranal specifically contributes to GABA.			
31	Alloysia polystachya		Leaves	Hydro-ethanolic	aceteoside	Acteoside: neuroprotective, antioxidant, and perhaps monoaminergic (serotonergic and/or GABAergic) system modulator Limonene and carvone: Animal models have shown CNS depressive and anxiolytic-like effects, most likely through limbic system activity and GABAergic modulation.	-	-	38
32	Albies pindrow		Aerial	n-hexane	Flavonoids ,triterpinoids	Monoamine oxidase (MAO) inhibition, benzodiazepine receptor agonism, GABAergic neurotransmission, and/or elevated brain ascorbic acid levels are all likely to have an anxiolytic impact.	200-400mg/kg		39
	Nymphaea albalinn		Whole	Ethanolic	Flavonoid	By modifying the	100mg/kg	>2000mg	40

33			plant			serotonergic system, especially through interaction with 5-HT <sub>2A</sub> receptors, Nymphaea alba extract exhibits anxiolytic effect that reduce aggression & defensive behaviour.		g/kg	
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**Anti-anxiety herbal plants**

❖ *Nigella sativa*

A *Black Cumin* is a medicinal herbal plant belonging to the family *Ranunculaceae*. The plant's seeds have long been used in various medical contexts. It has been widely utilized to treat disorders of the nervous system, including pain, brain injury, sleeping disorders, impairment of memory, and more. Furthermore, it is found that thymoquinone (TQ), a significant bioactive constituents of the essential oil, is reliable for much of the plant's medicinal qualities. [41]

❖ *passiflora incarnate*

*Passiflora incarnate* known as passionflower belonging to family *passifloraceae*, *P. incarnata* is recognised as a plant medication. According to reports, *P. incarnata*'s primary phytoconstituents are flavonoids. Among these are kaempferol and quercetin. The primary bioactive phytoconstituents of *Passiflora incaradata* have been proposed to be the harman alkaloids, the flavonoid chrysin, because of their ability to inhibit the MAO enzyme. According to recent findings, the body's benzodiazepine and GABA receptor-mediated biochemical processes are reliable for the sedative & anxiolytic activities of *passiflora incarnate*. [42]

❖ *Bacopa monnieri*

The Ayurvedic medicine *Bacopa monnieri*, commonly known as Brahmi, is a member of the Plantaginaceae family. is utilised as an anxiolytic and nootropic. Through GABAergic, antioxidant, and anti-inflammatory effects, its active bacosides protect the brain without inducing amnesia, improve memory, intelligence, and brain function, and lessen stress and anxiety. [43]

❖ *Withania somnifera*

*withania somnifera* ia a traditional ayurvedic herb known as an adaptogen belonging family solanaceae ayurvedic medicine for its calming, stress-reducing

❖ *Eschscholzia californica*

*Eschscholzia californica*, commonly known as the California poppy, is a small herbaceous plant belonging to the poppy family. It is characterized by blue-green, finely divided leaves and bright orange, cup-shaped flowers that close at night or during cloudy conditions.

Native to western North America, the plant thrives in sunny, dry environments with poor, well-drained soil and is recognized as the state flower of California. [44]

❖ *Tinospora cordifolia*

In Ayurveda, *Tinospora cordifolia* also referred to as Guduchi or Giloy is a significant medicinal plant. By soothing the neurological system, it is used to reduce tension and anxiety. Through the balance of brain chemicals, the plant exhibits anti-anxiety (anxiolytic) activity. Proteins, alkaloids, flavonoids, and saponins are examples of active ingredients. Saponins and flavonoids primarily aid in lowering tension and anxiety. Additionally, guduchi enhances mental health and immunity. [45]

❖ *Ziziphi Jujubae*

The botanical source of Semen *Ziziphi Jujubae* (Suanzaoren), the dried seeds commonly used in Chinese medicine to alleviate palpitations, anxiety, and insomnia, is *Ziziphus jujuba*, a member of the Rhamnaceae family. Jujubosides (A and B), flavonoids, and alkaloids are among the bioactive components of the seeds that contribute to its sedative and anxiolytic properties. According to pharmacological research, the extract modulates the GABAergic and monoaminergic neurotransmitter systems to generate sedative effects at higher dosages and anxiolytic activity at lower concentrations. [46]

❖ *Crocus sativus*

Saffron, scientifically known as *Crocus sativus L.*, belongs to the Iridaceae family. It is obtained from the dried stigmas of the *Crocus sativus* flower, a perennial plant cultivated in regions such as Iran, India, and the Mediterranean. Key bioactive compounds present in saffron include crocin, crocetin, safranal, and picrocrocin. Among these, crocin and safranal are primarily in charge of its anti-anxiety actions because they elevate mood and have a relaxing influence on the neurological system. [47]

❖ *Rubus brasiliensis*

*Rubus brasiliensis*, originating from Brazil, belongs to the Rosaceae family and is commonly utilized in traditional medicinal practices. Research indicates that its waxy ethanolic extract and infusion have anxiolytic effects on mice and rats. The active substances are

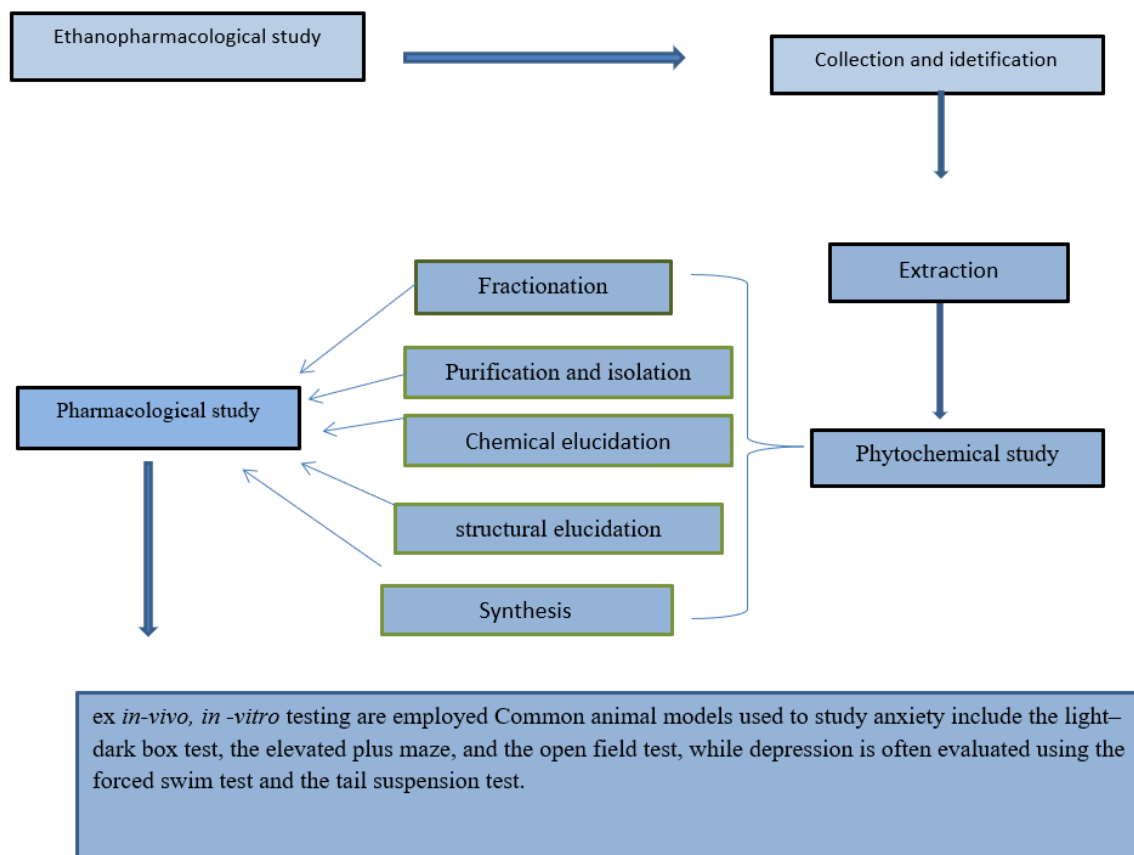
probably lipid-soluble components that influence the GABA A. The -benzodiazepine receptor system, which is comparable to popular anxiety medications and has little acute toxicity.[48]

❖ ***Euphorbia hirta***

*Euphorbia hirta*, belonging to the Euphorbiaceae family, is a medicinal herb. This small, hairy plant, widespread

in tropical regions, is used as the source for various biological remedies. Flavonoids, tannins, phenolic compounds, alkaloids, and triterpenoids are among its significant chemical components. According to studies, *Euphorbia hirta* has anti-anxiety activity mostly because of its flavonoids, which act on brain receptors linked to stress and anxiety to help calm the nervous system. [49]

**Pharmacological Studies of Medicinal Plant**



[50]

**DISCUSSION**

The present review highlights the significant therapeutic potential of medicinal plants in the management of anxiety disorders. Anxiety is a multifactorial neuropsychiatric condition associated with dysregulation of neurotransmitter systems including  $\gamma$ -aminobutyric acid (GABA), serotonin (5-HT), dopamine, and stress-related neuroendocrine pathways such as the hypothalamic–pituitary–adrenal (HPA) axis. Conventional pharmacological treatments including benzodiazepines and selective serotonin reuptake inhibitors (SSRIs) are effective but are often associated with adverse effects such as sedation, tolerance, dependence, withdrawal symptoms, and delayed onset of action. These limitations have stimulated growing

interest in alternative therapeutic approaches derived from medicinal plants.

The literature reviewed in this study indicates that numerous plant species possess anxiolytic activity through multiple mechanisms. Many medicinal plants such as *Bacopa monnieri*, *Passiflora incarnata*, *Withania somnifera*, *Nigella sativa*, and *Valeriana officinalis* exert their anxiolytic effects primarily through modulation of the GABAergic system, which plays a central role in the regulation of neuronal excitability and emotional behavior. Other plants demonstrate activity through serotonergic modulation, antioxidant effects, and anti-inflammatory actions, suggesting that herbal medicines may provide a multi-target therapeutic approach for anxiety management.

Phytochemicals such as flavonoids, alkaloids, terpenoids, and phenolic compounds have been identified as the major bioactive constituents responsible for anxiolytic effects. Compounds such as apigenin, bacosides, thymoquinone, honokiol, crocin, and valerenic acid have demonstrated promising neuropharmacological activity in both in-vitro and in-vivo studies. These compounds can influence neurotransmitter pathways, reduce oxidative stress, and modulate neuroinflammation, all of which are implicated in the pathogenesis of anxiety disorders.

Furthermore, the concept of polyherbal therapy, widely used in traditional medicine systems such as Ayurveda, suggests that combining multiple plant extracts may produce synergistic therapeutic effects. Polyherbal formulations may simultaneously target oxidative stress, inflammatory processes, and neurotransmitter imbalances, thereby offering a holistic approach for anxiety management. Preclinical studies using experimental models such as the elevated plus maze, light–dark box test, and open field test have provided strong evidence supporting the anxiolytic activity of several herbal extracts.

However, despite encouraging preclinical findings, clinical evidence remains limited for many medicinal plants. Standardization of herbal preparations, identification of active compounds, and well-designed clinical trials are necessary to establish their safety and efficacy. Overall, medicinal plants represent promising candidates for the development of safer and more effective anxiolytic therapies.

#### **Limitations of the Study**

Although this review provides comprehensive information regarding medicinal plants with anxiolytic potential, several limitations should be acknowledged.

**Limited clinical evidence:** Many of the studies included in this review are based on preclinical experiments using animal models, while well-controlled human clinical trials remain limited.

**Variability in extraction methods and plant sources:** Differences in plant species, geographical origin, extraction methods, and preparation techniques may influence the phytochemical composition and pharmacological activity of herbal extracts.

**Lack of standardized dosages:** Several studies report varying doses and formulations, making it difficult to establish standardized therapeutic doses for clinical use.

**Insufficient toxicological evaluation:** Although some studies report LD50 values, long-term toxicity, herb–drug interactions, and safety profiles are not fully explored for many medicinal plants.

**Methodological heterogeneity:** Different experimental models and behavioral tests used across studies make direct comparison of anxiolytic efficacy challenging.

**Limited mechanistic studies:** While several plants demonstrate anxiolytic effects, the precise molecular mechanisms and signaling pathways remain incompletely understood.

#### **Future Prospects**

Future research on medicinal plants as anxiolytic agents should focus on bridging the gap between traditional knowledge and modern pharmacological evidence. Several directions can be considered for advancing this field.

##### **1. Clinical validation of herbal anxiolytics**

Well-designed randomized controlled clinical trials are required to confirm the efficacy and safety of medicinal plants in human populations suffering from anxiety disorders.

##### **2. Standardization of herbal formulations**

Development of standardized extracts with defined phytochemical profiles will improve reproducibility and therapeutic reliability.

##### **4. Isolation and characterization of bioactive compounds**

Advanced phytochemical studies should aim to identify and isolate the active constituents responsible for anxiolytic activity.

##### **5. Molecular mechanism studies**

Further research is needed to clarify the interaction of herbal compounds with neurotransmitter receptors, signaling pathways, and neuroinflammatory processes involved in anxiety.

Development of novel herbal drug delivery systems

Modern drug delivery systems such as nanoparticles, phytosomes, and nanoemulsions could enhance the bioavailability and therapeutic effectiveness of herbal anxiolytics.

##### **6. Polyherbal formulation development**

Investigating synergistic interactions between different medicinal plants may lead to the development of more effective multi-target herbal therapies.

##### **7. Safety and toxicological evaluation**

Comprehensive studies addressing long-term safety, herb–drug interactions, and pharmacokinetics are essential before large-scale therapeutic use.

With continued scientific investigation and clinical validation, medicinal plants have the potential to become valuable therapeutic options for the safe and effective management of anxiety disorders.

#### **CONCLUSION**

An overview of the history of several herbal remedies for anxiety is provided in this paper. These herbs may reduce a variety of neuropsychiatric illness symptoms. They are utilised as nutritional supplements in addition to being registered herbal medicines. These plants are particularly useful in treating moderate mental and neurological conditions. But its implementation must to be supported by scientific data from both clinical and nonclinical research. These medicinal herbs can be used more safely and successfully for the treatment of mental illnesses their pharmacological characteristics are well understood.

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