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A Review – Herbs used as Antidepressant

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Abstract: *According to American Psychiatric Association, Depression is disorder which is common and serious medical illness that negatively affects how you feel, how you act, the way you think. It can lead to different physical and mental problems due to this person enable to function well. Antidepressant drug therapy is associated with symptoms such as delayed in action, adverse effect, drug-drug interaction, drug - food interaction, heart dysfunction, heart toxicity and many more. India has a legacy of natural herbal medicine and from ancient era till today all herbal plants shows their action without any side effect. In Ayurveda many more herbal treatments are available on depression and without any adverse effect on other organs patient relief from depression within less period of time. This review covers the antidepressant effect of different medicinal plant and their phytochemical ingredients. This review also discusses the reason behind why all these herbal plants used as an antidepressant drugs and also which part of plant shows action.*

Keywords: Antidepressant, Herbal plants, Antidepressant agents, Curcumin, Fenugreek.

I. INTRODUCTION

Depression refers to a wide range of mental health issues characterized by the absence of positive influence through severe exaggeration, lack of interest, mood disruption all of which have a negative impact on cognition and psychomotor function. Sorrow and melancholy are natural human emotions everyone experiences them but they do not endure long serious depression is more of a period of overpowering sorrow. According to World Health Organization around 40 million people worldwide display evidence of psychiatric illness. It accounts for 12.3% of global illness burden and is expected to climb to 15% by 2020. There are two types of mental depression 1) Unipolar depression 2) Bipolar depression.[(1)] According to the National Institute of Mental Health (NIMH), depression can also manifest as prenatal depression, seasonal affective disorders, and disruptive mood dysregulation and premenstrual dysphoric disorder[(2)] Many studies have demonstrated that value of appropriate treatment, particularly in terms of long-term outcomes. However, there is significant debate concerning the efficacy of various therapeutic techniques such as careful waiting, herbal medicine, psychotherapy or psychopharmacological treatment with antidepressant. Herbal therapy, particularly St John's wort medication is particularly popular among patients to prefer "Natural treatment" over "Chemicals". [(3)] For a variety of reasons natural products with antidepressant properties are a major concern. The therapeutic value of medicinal plants in the treatment of major depression has been demonstrated that the current review. By restoring normalcy to mood, raising awareness of one's own pleasures and interest, reversing the functional and social impairment caused by depression and lowering suicide rates, use of medicinal plants to treat depression has successfully improved quality of life.

Table 1: Herbal Plants used as an Antidepressant Drugs:

Sr. No	Herbalplant (Family)	Plant part used	Uses	Reason behind antidepressant activity	Ref.
1	Curcumin (Zingiberaceae)	Rhizome	Antiseptic, Alzheimer's disease, Cancer, Arthritis.	Curcumin possesses antidepressant activity through modulating the release of serotonin and dopamine. Curcumin enhances the level of neurotropic factors such as brain derived neurotropic factors.	(1)
2	Shatavari (Liliaceae)	Roots	Antioxidant, Antiviral	The antioxidants in shatavari have strong antidepressant abilities. They also impacted	(1)

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				neurotransmitters in the brain.	
3	Chamomile (Compositae)	Flowers	Anti-inflammatory Insomnia, Muscle spasm	Chamomile is commonly regarded as a mild tranquilizer or sleep inducers. Apigenin binds to specific receptors in brain that may decrease anxiety and initiate sleep.	(4)
4	Nymphaea Lotus: (Nymphaeaceae)	Leaf	Antidepressant, Anti-inflammatory	The results indicate that Nymphaea Lotus may possess anxiolytic properties	(5)
5	Lavender (Lamiaceae)	Flowers	Antiseptic, Antibacterial, Antianxiety	Lavender exerts receptors binding affinities with a relevant activity on the NMDA receptors. According to data state that the anti-agitation and depressant activities of lavender may be attributed at least in parts to the NMDA receptors modulation as well as inhibition of the SERT. It also protects SH-SY5Y cells from hydrogen peroxides induced neurotoxicity.	(6)
6	Black Cohosh (Ranunculaceae)	Root	Antianxiety	It's psychopharmacological activities on serotonergic and dopaminergic receptors.	(7)
7	Melisa Officinalis (Lamiaceae)	Leaf	Reduce stress, antianxiety, painkiller, improve appetite	Is proposed that lemon balm may work by increasing gamma-aminobutyric (GABA)levels in the brain. GABA is a mood regulator which works by stopping neurons from becoming over excited, and low levels of GABA can lead to restlessness and anxiety.	(8)
8	Kava (Piperaceae)	Roots	Antianxiety	p-Coumaric acid prevented LPS-induced depressive symptoms	(9)
9	Passion Flower (Passifloraceae)	Flowers	Treat anxiety and insomnia	Passionflower supplements may help treat anxiety, insomnia, and certain forms of painbecauseitmay increaselevelsofgamma-aminobutyricacid(GABA),achemicalthebrainmakes to help regulate mood. The passionflower (Passiflora incarnata) is a perennial plant with documented the rapeutic properties.	(10)
10	Lafoensiapacari: (Lythraceae)	Stem bark	Easing PMS symptoms	saponins, flavonoids, tannins, triterpene. This study provides evidence that the ethanolic extract of the stem barks of L. pacari possesses antidepressant-like effect	(5)
11	Rosmarinus Officinalis (Lamiaceae)	Oil	Increase blood circulation, Antianxiety	Antidepressant against CRS- induced depressive like behavior's as well as increased hippocampal and serious inflammatory cytokines gives antidepressant activity. Additionally protective function against LPS induced activation of BV-2 microglia.	(1)
12	Malas Domestica (Rosaceae)	Fruit	Antidepressant	Major concentration of phenolic compound causes antidepressant activity.	(1)

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13	Ginseng (Araliaceous)	Roots	Antidepressant	Due to presence of ginsenosides it shows antidepressant activity.	(11)
14	Ginkgo (Ginkgoaceae)	Leaf	Antidepressant	Ginkgo consist of compound EGb761shows antidepressant activity.	(12)
15	Centella Asiatica (Apiaceae)	Herbs	Antidepressant	Centella Asiatica consist of GABA-A compound which shows antidepressant activity.	(13)
16	Valerian (Valerianeace)	Flower	Antidepressant	Antidepressant and mood-stabilizing effects have also been proposed for valerian, which could be due to the plant's ability to interfere with noradrenergic and dopaminergic neurotransmitters, especially serotonin and GABA.	(14)

III. CONCLUSION

As we can see above, a collection of herbal plants with antidepressant effect was compiled from several journals and reported. To summarize, herbal plants are a highly rich source of substance that are responsible for boosting antidepressant action. As previously said, there are many more medicinal plants that provide prospects for alternative and effective treatment of depression with less adverse effects than manufactured medication

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