



HERBAL TEAS EFFECTIVE ON CENTRAL NERVOUS SYSTEM

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Herbal Teas Effective on Central Nervous System

A) **Sedative-hypnotic teas***

B) Antispasmodic teas

C) Tonics

A) Sedative-hypnotic teas

Indications:

Regulation of tension and anxiety syndromes (short term or temporary)

Elimination of difficulty in insomnia and falling asleep

Abandonment of conventional sedative drugs

Eliminating unrest in the period of convalescence

A) Sedative-hypnotic teas

Contraindications:

Herbal sedatives should not replace the drugs used in serious indications.

It can be used as a supporter in doctor control.

Depression

Not available in case of sleep disorder characterized by early morning waking

A) Sedative-hypnotic teas

- *Passiflora incarnata* (Passion flower) (Çarkıfelek)
- *Valeriana officinalis* (Valerian) (Kedi otu)
- *Hypericum perforatum* (St John's wort) (Sarı kantaron)
- *Humulus lupulus* (hops) (Şerbetçi otu)
- *Matricaria recutita* (Chamomile) (Papatya)
- *Lavandula officinalis* (Lavender) (Lavanta)
- *Tilia platyphyllos* (Linden) İhlamur
- *Melissa officinalis* (Lemon balm) (Oğul otu, Melisa)
- *Lippia citriodora* (Lemon verbena) (Limonotu)
- *Lactuca virosa* (Wild lettuce) (Acı marul)
- *Piper methysticum* (Kava) (Kava)
- *Piscidia erythrina* (Jamaican dogwood) (Kızılağaç)
- *Scutellaria laterifolia* (Scullcap) (Miğfer otu)

A) Sedative-hypnotic teas

***Passiflora incarnata*, Passion flower, Çarkıfelek**

It grows wild in the South of the United States and Mexico.

The medicinal parts are the whole or cut dried herb and the fresh aerial parts.

Parts use as herbal tea: flower and fruit above ground parts.

Passion flower contains flavonoids (vitexin), alkaloids (harman, harmaline), sterols and maltol (responsible for the sedative effect).

A) Sedative-hypnotic teas

***Passiflora incarnata*, Passion flower, Çarkifelek**

The concentration of alkaloids is very low, but they are CNS stimulants.

Anxiolytic effect is the same as Oxazepam

It may cause insomnia, hysteria, neural tachycardia, neuralgia, nausea at higher doses.

Passion flower is used in the form of tea (infusion) prepared from 4-8 g crude drug in 150 ml boiling water (3 times daily).

A) Sedative-hypnotic teas

Valeriana officinalis, Valerian, Kediotu

Valerian is the common name given to the crude drug consisting of the dried rhizome, roots and stolons (subterranean organs) of species *Valeriana* (Fam. *Valerianaceae*). Official drug is derived from *V. officinalis* L..

It contains, iridoids (0.5-2%), **valepotriates: valtrate, isovaltrate, dihydrovaltrate, acevaltrate**, **volatile oils (0.35-1%)**; **monoterpene (borneol, bornyl acetate)**, **sesquiterpene (valerenic acid, valerenic acid esters, valeranone)**, aminoacids, lignans.

Compounds which have shown to possess sedative-hypnotic activity are highlighted in blue and green.

A) Sedative-hypnotic teas

***Valeriana officinalis*, Valerian, Kediotu**

Valerian may be administered in the form of tea (infusion or decoction) prepared from 2-3 g crude drug (2-3 times daily or at bedtime).

It reduces the activity of the central nervous system, due to an increase in concentration of GABA.

It is indicated for insomnia and palpitation.

Fresh plant does not smell. When dry, the valerenic acid smells and it does not smell when it is boiled.

A) Sedative-hypnotic teas

***Valeriana officinalis*, Valerian, Kediotu**

Compared with synthetic drugs:

- The effect was weaker than chlorpromazine, but coordination in patients is better.
- Alcohol toxicity is lower than diazepam.

It is frequently associated with *Melissa officinalis*, *Passiflora incarnata*, *Humulus lupulus*.

In slightly depression, combined with *Hypericum perforatum* and *Humulus lupulus*.

*It is not toxic plant, but should not be taken with central nervous system depressants and alcohol.

*Long term use of *Valeriana officinalis* with other sedative drugs may increase the effect of sedatives, may cause depression and some negative effects on heart.

A) Sedative-hypnotic teas

***Hypericum perforatum*, Saint John's wort, sari kantaron**

St John's wort consists of the leaves and flowering tops of *Hypericum perforatum*.

It contains, flavonoids. anthraquinone derivatives, (hypericin, pseudohypericin), phloroglucinol derivatives (hyperforin). Hypericin and hyperforin are both active compounds of the antidepressant effect.

Hypericum perforatum extract/hyperforin inhibits of synaptosomal uptake of GABA in the CNS.

It is suggested for mild depression and premenstrual syndrome.

A) Sedative-hypnotic teas

***Hypericum perforatum*, Saint John's wort, sari kanton**

According to the German Commission E monograph, the daily dose of St John's wort is 2-4 g crude drug.

Tea is prepared from 2-4 g crude drug per 150 ml boiling water (infusion) 3 times daily.

It is easy to be tolerated up to 12 weeks of use.

*However, overdose can cause gastrointestinal syndrome, photosensitivity and fatigue.

*It may be interacted with anticonvulsants, cyclosporin, HIV protease inhibitors, oral contraceptives, and warfarine.

*Contraindicated in pregnancy and lactation.

A) Sedative-hypnotic teas

***Humulus lupulus*, Hops (Şerbetçi otu)**

It grows widely in Europe and north America, and belongs to *Cannabaceae* family,

The plant is widely cultivated in Turkey (Bursa, Bilecik), England and France.

The drug contains flavonoids, chalcones, volatile oil including humulene, myrcene, beta-caryophyllene, an oleoresin including alfa-bitter acids (humulone, cohumulone, adhumulone), bitter acids (lupulone, colupulone, adlupulone) and their oxidative degradation products (**2-methyl-3-buten-2-ol**), tannins.

The sedative activity of hops is attributed to (**2-methyl-3-buten-2-ol**), but there is insufficient information to confirm this.

A) Sedative-hypnotic teas

Humulus lupulus, Hops, Şerbetçi otu

Hops may be administered several times daily as a tea (infusion) prepared from 1-2 g of the dried drug before bed.

It might be associated with Passionfruit (*Passiflora*).

*Adverse events might include allergy and disruption of menstrual cycles.

*It causes dizziness and vomiting at high doses.

*Contraindicated in pregnancy and lactation.

*It should not be taken with sedative-hypnotic agents and alcohol.

A) Sedative-hypnotic teas

Matricaria recutita, Chamomile, Papatya

Chamomile consists of the dried flower heads of *Matricaria recutita*.

(*Matricaria chamomilla*=German chamomile).

It contains coumarins, flavonoids (apigenin), volatile oil whose main components are alfa-bisabolol and chamazulene (1-15%).

The sedative properties of chamomile may be attributed to certain flavonoids because it has been referred that apigenin has an affinity for central benzodiazepine receptors and shows a distinct anxiolytic action.

A) Sedative-hypnotic teas

Matricaria recutita, Chamomile, Papatya

The most popular dosage form of Chamomile is an infusion prepared from 5 g dried flowers in 150 ml boiling water (a cup 3 times daily).

*Chamomile is a safe herb, but presence of lactones in the drug preparations may cause allergic reactions and rare cases anaphylactic reactions.

*In allergic conditions it should be used with caution.

A) Sedative-hypnotic teas

***Lavandula angustifolia*, Lavender, Lavanta**

Lavender consists of the flower of *Lavandula angustifolia* (Fam: Lamiaceae).

Flowering parts are used as drug. It grows in Mediterranean region.

It contains 1-3% volatile oil (linalool, linalyl acetate, geraniol). It also contains hydroxycoumarins and caffeic acid derivatives.

Volatile oils are believed to be responsible of action.

The whole drug is used for infusions or as an extract.

1-2 teaspoons of dried herb per cup of tea is recommended.

No health hazards or side effects but,

*It is contraindicated during pregnancy and lactation.

A) Sedative-hypnotic teas

Tilia platyphyllos, Linden, Ihlamur

Drug: Flower and flower status are used as tea.

It contains flavonoids, volatile oils - farnesol (responsible for the effect), mucilage.

No health hazards or side effects.

A) Sedative-hypnotic teas

***Melissa officinalis*, Lemon Balm (Oğul otu)**

Fresh and dried leaves are used.

It contains flavonoids, caffeic acid derivatives, glycosides and volatile oils.

Volatile oils (citral, citronellal, geraniol) are responsible for the effect.

It shows sedative, antispasmodic and carminative effects.

2.5% infusion are used for sedative effect.

A) Sedative-hypnotic teas

***Lippia citriodora*, Lemon verbena (Limonotu)**

- Leaves are used as a drug.
- It contains volatile oils (citral) which are responsible for the effect.
- It is sold as *Melissa officinalis*.

B) Antispasmodic teas

Indications:

Anxiety, irritability, restlessness and insomnia

Nerve-induced dyspepsia

Irritable bowel syndrome and colitis

Headache and migraine

Spasmolytic in dysmenorrhea



B) Antispasmodic teas

- *Viburnum opulus* (Cramp bark) (Gilaburu)
- *Lobelia inflata* (Lobelia) (Lobelya)
- *Leonurus cardiaca* (Motherwort) (Aslan kuyruğu)
- *Dioscorea* (Wild yam) (Yabani yam)

They are safe and well tolerated.

They can be used in children and the elderly. Some of the aqueous-alcoholic extracts are used for treatment (*Passiflora*)



C) Tonics

Indications:

Neural fatigue

Neuralgia and herpes infections

Depressive conditions

Insomnia (early waking and failure to complete sleep)

Long-term uses are specific to each drug.



C) Tonics

- *Scutellaria lateriflora* (Scullcap) (Miğfer otu)
- *Turnera aphrodisiaca* (Damiana) (a mexican drug, used as an aphrodisiac)
- *Verbena officinalis* (Vervain) (Mine çiçeği)
- *Withania somnifera* (Indian ginseng) (Hindistan Ginsengi)



Sedative-hypnotic Effective Herbal Teas, Some examples of prescription

- Radix Valerianae 15 p
- Flos Citri 15 p
- Folia Melissae 15 p
- Lupuli Strobuli 15 p

1 p (portion) = 1gram

It is delivered in 5 g packs. (12 times)
Add 250 ml of boiling water to the 5 g mixture.

drink before bedtime.

Sedative-hypnotic Effective Herbal Teas, Some examples of prescription

- Lupuli Strobuli 2 p
- Radix Valerianae 2 p
- Folia Melissa 2 p

1 p (portion) = 10 g

12 times 5 g tea-bag.

1 cup in a day.

Sedative-hypnotic Effective Herbal Teas, Some examples of prescription

- Flos Crategi 1 p
- Flos Rhoeados 1 p
- Herba Passiflorae 1 p
- Cortex Salicis 1 p
- Flos Aurantii 1 p

1 p (portion) = 10 g

10 times 5 gram tea-bag

1 cup in a day.

Sedative-hypnotic Effective Herbal Teas, Some examples of prescription

- Folia Rosmarini 25 g
- Herba Hyperici 10 g
- Radix Valerianae 30 g
- Pericarpium Citri 20 g

17 times 5 g tea-bag,

2-3 cups in a day.

Sedative-hypnotic Effective Herbal Teas, Some examples of prescription

- Flos Crataegi 1 p
- Folia Melissa 1 p
- Herba Origani 1 p
- Herba Passiflorae 1 p
- Radix Valerianae 1 p

1 p (portion) = 10 g

10 times 5 g tea-bag

2 cups in a day

Sedative-hypnotic Effective Herbal Teas, Some examples of prescription

- Flos Lavandulae 1 p
- Folia Menthae 1 p
- Flos Rosae 1 p
- Folia Rosmarini 1 p

1 p (portion) = 15 g

12 times 5 g tea-bag

3 cups in a day