

Introduction

YASDARU Herbal Pharmaceutical Company is a knowledge-based company and was founded in 2008 and has grown to a wide-range of capacities including conducting basic science research, manufacturing plant-based medications, food supplements, cosmetics and veterinary medicines. Our company is also capable of developing medicinal products for agricultural purposes. Through a knowledge transfer strategy, we have succeeded to develop and transfer our research findings to the pharmaceutical industry and to end users. At YAS DARU we are fully capable of preparing standardized crude medicinal plants, essential oils, herbal extracts and finished products for human and animal use and. Also,

we welcome the ideas from researchers in the field who are willing to turn their novel ideas into action. We accept requests of mutual collaborations with other related industries, researchers and investors to create and implement the best strategies for business development in food, drug and cosmetic fields. Our team is composed of a number of professional staff with diverse background of expertise in pharmaceutics, food industry, cosmetics, biology, pharmaceutical sciences and chemistry. Our scientific staff along with the administrative and finance managers have made it possible to attract a great deal of interest from other pharmaceutical companies to perform contract manufacturing outside our company. Major part of our path was paved by the Ministry of Health and Medical Education of Iran in a mission to support local manufacturers and to create employment opportunities. YAS DARU is completing a new one-hectare pharmaceutical

manufacturing plant in Caspian Industrial Complex, 100 Km west of Tehran to produce all dosage forms of pharmaceutical products in large scales.

Who we are

YAS DARU Herbal Pharmaceutical Company is a knowledge-based company capable of developing medicinal, dietary and cosmetic products for humans and animals.

At YAS DARU we are fully capable of preparing standardized crude medicinal plants and any herbal extracts or finished products for human and animal use.

Contact Us

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Yas Daru
HERBAL PHARMACEUTICAL CO.
Private Company

Our Founder

The research of our founder, Prof. Gholamerza Amin has been incorporated into the natural health products of YAS DARU. Prof. Amin has dedicated his academic life in the field of pharmacognosy which is the science of using natural sources including medicinal plants in formulating natural health products (NHPs). His research started 45 years ago by indicating medicinal plants of different regions of Iran. The collected plant species are catalogued in the Herbarium of Faculty of Pharmacy at Tehran University of Medical Sciences (TUMS), where he supervises identification of plant species and issues corresponding scientific names and voucher numbers. Prof. Amin has also founded the Herboratum (Medicinal Botanical Garden) of the Faculty of Pharmacy at TUMS where he grows and demonstrates live plant species for educational and research purposes. His research is heavily involved in investigating bioactive compounds and biological activities



of medicinal plant extracts and essential oils in different in vitro and in vivo models as well as clinical trials. Antimicrobial, anti-inflammatory, antioxidant, anticancer, and antidiabetic activities of Iranian medicinal plants have been studied and published by Prof. Amin. He founded YAS DARU in 2008 based on the philosophy of using the knowledge gained in the past 45 years in his own field of research by putting together a scientific and executive team of experts in different field of pharmaceutical sciences. YAS DARU is a knowledge-intensive spin-off company located in the Tech Tower of the Tehran University of Medical Sciences. Under supervision of Prof. Amin anti-inflammatory, anti-cancer, antidiabetic, anti-migraine and anti-multiple sclerosis medications are being developed and formulated into finished products.

Our Scientific and Executive Team

Prof. Gholamreza Amin, PhD

Founder, General Manager and Head of R&D

Professor Emeritus of Pharmacognosy, Faculty of Pharmacy
Tehran University of Medical Sciences

Dr. Mohsen Amin, PhD

Chairman of the Board

Assistant Professor, Faculty of
Pharmacy

Tehran University of Medical Sciences

Dr. Mani Seyed Jabbari, PharmD

Production Manager

Pharmacist, R&D member

Mr. Alireza Shayan, Certified Auditor

Accounting Manager

Dr. Maryam Kamani, PharmD

Technical Manager

Pharmacist, R&D member

Dr. Kourosh Shayan, PhD

Marketing Manager

Amir Ahmad Hakimi, Professional Engr. Construction and Engineering Manager

Honeythyme

HONEYTHYME contains standardized thyme (*Thymus vulgaris* L.) extract and natural honey, a synergistic agent for respiratory inflammations.

Medical indication: HONEYTHYME is recommended for upper-respiratory tract problems (dry and productive coughs, asthma, bronchitis and laryngitis). It has strong antibacterial and antifungal effects.

Medicinal ingredients: Thyme extract contains essential oils (e.g. thymol and carvacrol), flavones, saponins, and tannins. Natural honey sweetens the syrup, softens the throat and has anti-cough and antibacterial effects. The syrup has been

standardized at 0.06 mg/ml thymol.

Pharmacology: It is well-known that thymol and carvacrol have relaxant effects on ileal as well as tracheal smooth muscles through triggering secretion of acetylcholine and histamine.

Also, flavones share the same mechanisms in the thyme extract. Secretomotoric activities of thyme extract due to its volatile and saponin compounds are substantiated.

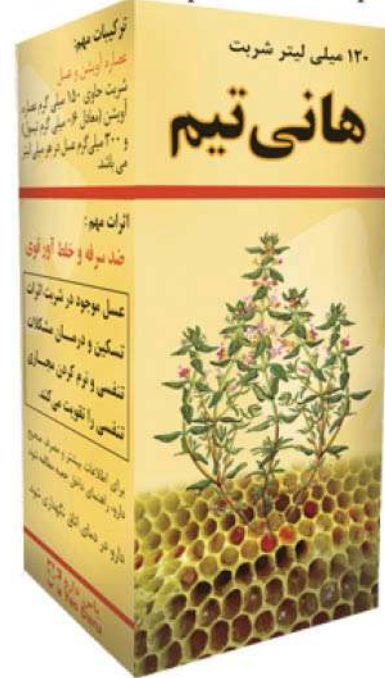
Antimicrobial effects of thyme extract in common cold are very well documented in the literature. This is because of the presence of phenolic compounds (e.g. thymol and carvacrol) in the extract which makes it 25 times more potent than phenol with much



less toxicity.

Recommended dosage: One spoonful, 3 to 4 times a day for adults; one teaspoonful, 3 to 4 times a day for children 12-6 years of age; half of teaspoonful, 3 times a day for children less than 8 years of age.

Side effects: There has been no report of side effects so far, but stop using in case of any allergy. **Pregnancy and lactation:** The safety of *Thymus vulgaris* in pregnancy or lactation has not been recognized. As a precautionary measure, the drug should not be used during pregnancy or lactation except on medical supervision.



Considerable notes: The biological effect of herbal medicines, therefore it is advised to complete the treatment according to physician's advice. Throw away the remaining syrup after treatment. Extra information about thyme and its products is available under the keywords thyme or *Thymus vulgaris*.

Packaging: Offered to the market in 120 ml syrups inside the box along with a brochure.

G-RUP

The Healing Power of Ginger & Honey



G-Rup is an herbal product from ginger (*Zingiber officinale* Rose) extract and honey in the form of syrup. Ginger is a well-known botanical source from the ancient time and has an investigated data in modern medicine.

Medical indication: Arthritis and rheumatic pains; common cold and myalgia

Traditional medicine: Flatulence and reflex in cold and wet stomach

Medicinal ingredients: Essential oils and resins. Major components of essential oils are bisabolene, curcumene and zingiberene. The medicine is standardized based on zingiberene (the most important ingredient of essential oils constituting at least 21%). G-Rup has been standardized by 100 mg/ml ginger extract.

Pharmacology: Scientific data showed that the anti-inflammatory effect of ginger was more than aspirin, so it was employed for arthritis and rheumatic disorders, also the ginger extract was effective as immunogenic and anti microbial agent used for the treatment of common cold.

Recommended dosage: One spoonful, 3 times a day for adults; one teaspoonful, 3 times a day for children: 12-4 years of age

Pregnancy and lactation: Permitted to take within the recommended dosage, under the physician recommendations.

Side effects: Dermatitis in sensitive person to ginger.

Interactions: Those who use anticoagulants or suffer from gallstone have to consume under the physician's advice. **Considerable notes:** It should be consumed within the recommended dosage and should be stopped in case of allergic symptoms.

Packaging: Offered to the market in 120 ml syrup inside the box along with a brochure.

ARHEUMIN

ARHEUMIN drop is an herbal product from ginger (*Zingiber officinale* Rosc.) extract in the form of tincture. This liquid is absorbed quickly through the skin and is fast-acting.

Medical indication: Nausea in motion sickness, pregnancy and chemotherapy; anti-inflammatory in rheumatoid arthritis, joint and skeletal pains.

Medicinal ingredients: Essential oils and resins. Major elements of essential oils are bisabolene, curcumene and zingiberene. The medicine is standardized based on zingiberene (the most important ingredient of essential oils constituting at least 9%). Arheumin has been standardized by 20 mg/ml ginger extract.

Pharmacology: Ginger has been found to reduce vomiting more effectively than dimenhydrinate and its anti-inflammatory effect was comparable to that of aspirin. Antioxidant activity of ginger was due to inhibition of lipoxygenase. These effects may be the result of the action of its volatile chemical component.

Recommended dosage:

Anti-nausea during pregnancy: 40 drops in the morning after breakfast.

- × **Anti-nausea in motion sickness:** 50 drops, 30 to 45 minutes before travel.
- × **Anti-nausea in chemotherapy:** 30 drops, 3 times a day before meals.
- × **JOINT PAIN, RHEUMATISM AND SKELETAL PAIN:** oral or

topical use, 20 to 40 drops each time, 2 to 4 times a day.

Considerable Notes:

- × The recommended dosages are for adults and could be reduced for children (older than 4) and teenagers.
- × Dilute with half a glass of water or fruit juice in time of use. Avoid using directly.

Pregnancy and lactation: Permitted to take within the recommended dosage, under the physician recommendations.

Side effects: Although there has been no reports of side effects of ginger and its products, It should be consumed within the recommended dosage and should be stopped in case of allergic symptoms.

Interactions: Those who use anticoagulants or suffer from gallstone have to consume under the physician's advice.

Packaging: Offers to the market in 30 ml drops inside the box along with a brochure.



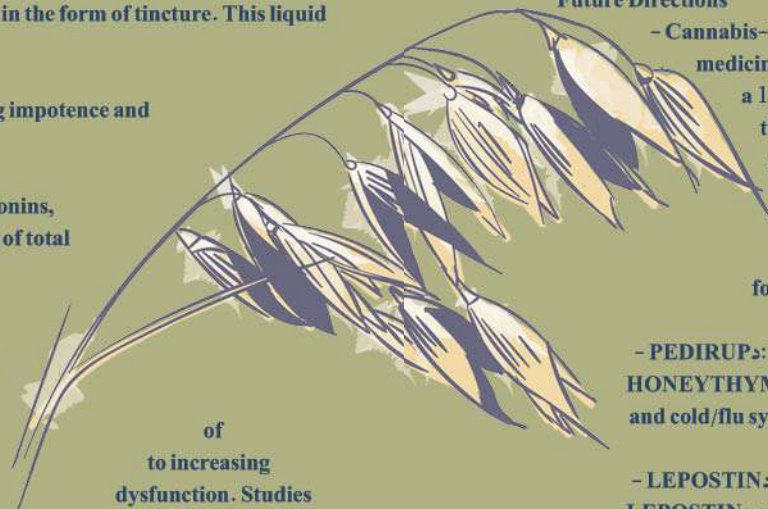
AVENASIN

AVENASIN is an herbal product from *Avena sativa* L. (oat) extract in the form of tincture. This liquid is absorbed quickly through stomach and is fast-acting.

Medicinal indication: Tranquilizer and improves sleep time; treating impotence and premature ejaculation; treating smoking addiction.

Medicinal ingredients: Total phenol, glucans, silicic acid, steroid saponins, avenacosid A and B. Each 15 drops is standardized based on 430 mg of total oat extract.

Pharmacology: The tincture of oat is used as a nervous tonic in case of insomnia, nervous exhaustion, antidepressive and these effects are shown to act via MAO-B inhibitory activity. Also oat works by increasing the amount of free testosterone in the blood which leads to sexual functions and treatment of sexual dysfunction. Studies have shown that oat helps smoking cessation. Recommended dosage: 15-10 drops, 3 times a day in a small amount of water for adults, 15 minutes before meals. If needed, take 50-30 drops in water at bedtime; 3 drops, 3 times a day for children 12-4 years of age. Considerable notes: Take drops in a small amount of water and sweeten with honey. Oat product should not be used by persons with intestinal obstruction and hyperthyroidism. Should not be used in case of allergy to cereals.



of
to increasing
dysfunction. Studies

Pregnancy and lactation: There is no data available on its use during pregnancy and lactation. Caution is recommended.

Packaging: Offered to the market in 30 ml drops inside the box along with a user guide.

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Future Directions

- **Cannabis-derived medications:** A series of Iranian native cannabis-derived medicines are in the pipeline research and development. The first product is a 15 ml-buccal spray and is ready to be launched in the market soon for the treatment of pain and muscular stiffness in multiple sclerosis (MS) patients. The medicine contains certain amounts of cannabinoids especially THC and CBD totally extracted from selected genotypes of Iranian medical Cannabis. The second cannabis-based medicine containing cannabidiol (CBD) has been developed to be administered for high-blood sugar issues.

- **PEDIRUP:** PEDIRUP is a 60 ml syrup which is a modified formulation of HONEYTHYME to be used for the children under 4 years of age suffering from cough and cold/flu symptoms. Production of this drug is in process.

- **LEPOSTIN:** This medicine is a novel formulation for controlling high-cholesterol. LEPOSTIN which is made from oat seeds can be taken together with traditional medications with no contraindication. Production of this drug is in process.

- **TURMERIN:** This medicine is a formulation for controlling of dyspepsia. TURMERIN which is made from turmeric extract, can be taken together with traditional medications with no contraindication. Production of this drug is in process.

PAINMAX

PAINMAX is a roll-on bottle containing natural essential oils of peppermint (*Mentha piperita*) and lavender (*Lavandula officinalis*). This is a novel topical medication for migraine, which uses medicinal plants for relieving migraine pains.

Medical indications: Migraine headaches, sedative and calmative

Medicinal ingredients: Peppermint and lavender essential oils. The most potent components of peppermint and lavender are menthol (45-35 %) and mentone (20-15 %); linalool (50-20 %) and linalyl acetate (40-30), respectively. Painmax has been standardized by 16-13 menthol.

Pharmacology: The analgesic effect of peppermint oil can be explained by its potency to stimulate the transient receptor potential cation channel and



→ Upon rubbing on the temples, lavender essential oil decreases pain frequencies and muscle spasm. It also facilitates the blood circulation and alleviates the headaches.

Recommended dosage: The medicine shall be rolled on the temples, forehead and back of the head. Based on the severity of the headache this shall be continued every 30-15 minutes.

Side effects: There may be dermatitis allergic reactions to lavender and peppermint essential oils. No drug interactions have been reported.

Considerable notes: - The solution is NOT EDIBLE - The solution is not intended for the children under 7 - The solution may cause allergic reactions - The medication is much more effective when used upon the onset of the headaches - DO NOT RUB ON THE EYES AND MOUTH

- Keep out of reach of children - Keep the bottle in a cool environment when opened - Wash your hands after using.

Pregnancy and lactation: Do not apply the medication in pregnancy or lactation period.

Packaging: The solution is packaged in a 5ml roll-on bottles in a box along with a brochure.



Cooling
Reflection



Massage
Effect



Natural
Essential oil

as well as tracheal smooth muscles through the effects on secretion of acetylcholine and histamine. Also, flavones share the same mechanisms in the thyme extracts. Secretomotoric activities of thyme extract due to its volatile antimicrobial effects of thyme extract in common cold are very well documented in the literature. This is because of the presence of phenolic compounds (e.g., thymol and carvacrol) in the extract

Recommended Dosage:

12 - 6 children: One jam spoonful, 3 to 4 times a day | 2-6 years

Children 6-1 years: one of tea spoonful, 3 times a day

Side Effects:

There has been no report of side effects so far, but stop using in case of any allergy.

Considerable Notes:

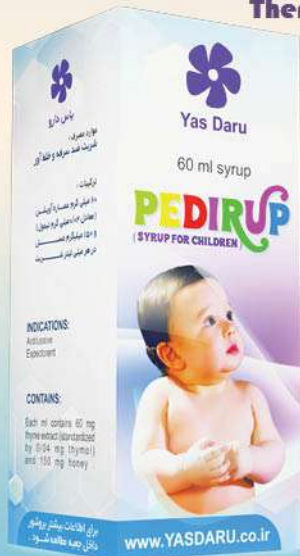
The effect of herbal medicines is slow and takes time, therefore it is advised to:

- complete the treatment according to your physician's advice.

-Throw away the remaining syrup after treatment.

Packaging:

Offered to the market in 60 ml syrup inside the box along with a brochure



PEDIRUP

60 ml Syrup

Thyme (*Thymus vulgaris* L.) is one of the most important edible plants in the world that has been used for years as pain reliever, treatment for respiratory and indigestion problems and as an antibacterial and antifungal agent. Recent researches have proved many effects and mechanisms of Thyme and as a result, various forms of it are provided in pharmaceutical factories and consumed all over the world. Pedirup is the first syrup containing Thyme extract and natural honey, a synergistic agent for respiratory problems.

Important Ingredients of the Syrup:

The most important ingredients of Pedirup syrup formulation are:

- Thyme extract that contains essential oil (e.g., thymol and carvacrol), flavones, saponins, and tannins.
- Natural honey sweetens the syrup, softens the throat and has anticough and antibacterial effects.

Prescription:

- Respiratory problems (dry and productive coughs, asthma, bronchitis and laryngitis)
- Strong antibacterial and antifungal effects

Pharmacology:

It is well known that thymol and carvacrol have relaxant effects on ileal