



# **Egyptian Herbal Monograph**

**Volume 4**

**Herbal Formulations used in Egypt**

**Egyptian Drug Authority (EDA)**

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# Egyptian Herbal Monograph

## Herbal Formulations Used in Egypt

**Thyme/ Primula**

**زعرور / زهرة الربيع**

### 1. Names & Synonyms

**Thyme**

***Thymus vulgaris* L. (1)**

**Syns:** *Origanum thymus* Kuntze, *Thymus collinus* Salisb.

**Family:** Lamiaceae (Labiatae).

**Arabic:** Za'ater زعرور.

**English name:** English Thyme, Garden Thyme.

***Thymus zygis* L. (2)**

**Syns.:** *Origanum zygis* (L.) Kuntze, *Thymus angustifolius* Salisb.

**Family:** Lamiaceae (Labiatae).

**Arabic:** Za'ater زعرور.

**English name:** Spanish Thyme.

**Primula (3)**

***Primula veris* L.**

**Family:** Primulaceae.

**Syns.:** *Primula officinalis* (L.) Hill.

**Arabic:** Zahr El-hakl زهر الحقل, Zahrat El-rabee' زهرة الربيع

**English name:** Cowslip, Primula (2-4).

### 2. Parts used for medicinal purpose

**Thyme:** Dried and fresh herb (1, 2, 5).

**Primula:** Root (6-11).

### 3. Major chemical constituents

**Thyme:**

- **Essential oil:** Thymol, carvacrol, *p*-cymene,  $\alpha$  and  $\beta$ -terpinene, linalool, terpinen-4-ol, borneol, 1,8-cineole,  $\alpha$ -thujene,  $\alpha$ -pinene and caryophyllene (4).
- **Flavonoids:** Apigenin, narigenin, kaempferol and luteolin (and its glycosides) (12).



- **Phenolic acids:** Salvianolic, rosmarinic, cinnamic, ferulic, caffeic and gallic acids (12).
- **Others:** Monoterpene glycosides (13).

**Primula:**

- **Triterpene saponins:** Primula saponins I and II, priverosaponin B22-acetate (6, 14, 15).
- **Phenolic glycosides:** Primverin and Primulaverin (6, 14).

#### 4. Medicinal uses (Indications)

- A. Expectorant in case of productive cough (16).
- B. Treat symptoms of acute bronchitis and respiratory infections with thick phlegm following exposure to cold (17).

#### 2. Herbal preparations correlated to medicinal use (16)

1. Thyme liquid extract (Extraction solvent: Ammonia solution 10%, glycerol 85%, ethanol 90%, water (1:20:70:109)) and Primula liquid extract (Extraction solvent: Ethanol 70%).
2. Thyme liquid extract (Extraction solvent: Ammonia solution 10%, glycerol 85%, ethanol 90%, water (1:20:70:109)) and Primula liquid extract (Extraction solvent: Ethanol 55%).
3. Thyme liquid extract (Extraction solvent: Ammonia solution 10%, glycerol 85%, ethanol 90%, water (1:20:70:109)) and Primula tincture (1:5) (Extraction solvent: Ethanol 50%).
4. Thyme liquid extract (Extraction solvent: Ammonia solution 10%, glycerol 85%, ethanol 90%, water (1:20:70:109)) and Primula soft extract (Extraction solvent: Ethanol 55%).
5. Thyme liquid extract (Extraction solvent: Ethanol 20%) and Primula liquid extract (Extraction solvent: Ethanol 15%).
6. Liquid extract from mixture of Thyme and Primula (Extraction solvent: Water).
7. Dry extract from Thyme (Extraction solvent: Ethanol 70%) and dry extract from Primula, (Extraction solvent: Ethanol 47.4%).
8. Dry extract from Thyme (Extraction solvent: Ethanol 70%) and dry extract from Primula (Extraction solvent: Water).

**Herbal preparations are in pharmaceutical dosage forms. The pharmaceutical form should be described by the pharmacopoeia full standard term.**



### 3. Posology and method of administration correlated to medicinal use (16)

#### Preparation 1

##### Indication A

**Adolescents, adults and elderly:** Single dose: 500 mg Thyme extract and 250 mg Primula extract, 6 times daily.

**Children 4-11 years:** Single dose: 330 mg Thyme extract and 170 mg Primula extract, 3-5 times daily.

##### Indication B

**Infants 6-12 months:** 65 mg Thyme extract and 32.4 mg Primula extract, 6 times daily. Total daily dose: 390 mg Thyme extract and 194.4 mg Primula extract.

**Children 1-4 years:** 162.5 mg Thyme extract and 81 mg Primula extract, 6 times daily. Total daily dose: 975 mg Thyme extract and 486 mg Primula extract.

**Children above 5 years, adolescents and adults:** 487.5 mg Thyme extract and 243 mg Primula extract, 4 times daily. Total daily dose: 1950 mg Thyme extract and 972 mg Primula extract.

#### Preparation 2

##### Indication B

**Adults:** 500 mg Thyme extract and 250 mg Primula extract, 3 times daily.

**Children above 4 years:** 250 mg Thyme extract and 125 mg Primula extract, 3 times daily.

#### Preparation 3

##### Indication A

**Adolescents, adults and elderly:** 430 mg Thyme extract and 210 mg Primula tincture, 5 times daily.

**Children 4-11 years:** 360 mg Thyme extract and 180 mg Primula extract, 3-5 times daily.

#### Preparation 4

##### Indication A

**Adolescents, adults and elderly:** 1160 mg Thyme extract and 170 mg Primula extract, 4 times daily.

**Children 4 -11 years:** 770 mg Thyme extract and 120 mg Primula extract, 3-4 times daily.

#### Preparation 5

##### Indication A

**Adolescents, adults and elderly:** 1240 mg Thyme and 410 mg Primula, 3-5 times daily.

#### Preparation 6



#### **Indication A**

**Adolescents, adults and elderly:** 3080 mg equivalent to: 620 mg Thyme extract and 220–510 mg of Primula extract, 4 times daily.

#### **Preparation 7**

##### **Indication A**

**Adults and elderly:** 160 mg Thyme extract and 60 mg Primula extract, 3 times daily.

#### **Preparation 8**

##### **Indication A**

**Adolescents, adults and elderly:** 75 mg dry Thyme extract and 37.5 mg dry Primula extract, 3 times daily.

**Duration of use:** If the symptoms persist longer than one week during the use of the medicinal product, a doctor or a pharmacist should be consulted.

**Method of administration:** Oral use.

#### **4. Contraindications**

Hypersensitivity to the active substances and to other plants of the same family.

#### **5. Special warnings and precautions for use**

- If the symptoms worsen or persist longer than one week during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- If dyspnea, fever or purulent sputum occurs, a doctor or a pharmacist should be consulted (4-6, 16).
- The use in children under 4 years (Herbal preparations 2, 3 and 4), under 12 years (Herbal preparations 5, 6 and 8) and under 18 years (Herbal preparation 7) is not recommended without medical supervision (5, 16).
- Insufficient data are available concerning administration in infants under 6 months (Herbal preparation 1). Therefore, it should not be given to infants under 6 months.
- Caution is recommended in patients with gastritis or gastric ulcer (16).

#### **6. Interactions with other medicinal products and other forms of interaction**

None reported (16).

#### **7. Fertility, pregnancy, and lactation (16)**

- Safety during pregnancy and lactation has not been established. In the absence of sufficient data, the use during pregnancy and lactation is not recommended.



- No fertility data available.

#### **8. Effects on ability to drive and use machines (16)**

No studies on the effect on the ability to drive and use machines have been performed.

#### **9. Undesirable effects**

- If adverse reactions occur, a doctor or a pharmacist should be consulted.
- Gastric disorders, nausea and allergic reactions may occur (6, 16).

#### **10. Overdose**

No case of overdose has been reported (16).

#### **11. Relevant biological properties**

Not required as per Egyptian guidelines for registration of herbal medicines.

#### **12. Additional information**

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#### **13. Date of compilation/last revision**

06/08/2023.

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