



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

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Ispaghula, Alexandrian Senna

لقمة النعجة / سنامكي

1. Names & Synonyms

Ispaghula

***Plantago ovata* Forssk. (1,2)**

Syns.: *Plantago decumbens* Forssk., *P. ispaghul* Roxb

Family: Plantaginaceae

Arabic: Loqmet El-na'aga لقمة النعجة, Gneima جنيمة

English name: Spogel plantain, Ispaghula, Blond Psyllium, Indian Plantago, Ispagol, Ispaghul, Pale Psyllium, Spogel .

Alexandrian Senna

***Senna alexandrina* Mill. (3,4)**

Family: Leguminosae (Caesalpinioideae).

Syns.: *Cassia acutifolia* Delile, *Cassia senna* L., *Cassia lanceolata* Forssk.

Arabic: Sanna Mekki سنامكي , Salamekki سلامكي.

English: True Senna, Alexandrian Senna.

2. Parts used for medicinal purpose

Ispaghula (5): Dried ripe seeds (6) and husk (Episperm and collapsed adjacent layers removed from the seeds (7-9).

Alexandrian Senna: Leaves and pods (4).



3. Major chemical constituents

Ispaghula

Seeds:

- Polysaccharides: arabinoxylan mucilage, cellulose, hemicellulose and lignin (10).
- **Others:** Aucubin (iridoid glucoside) (7), crude fibers, proteins and fats (11).

Husk:

- **Polysaccharides:** Soluble (arabinoxylan mucilage) and insoluble (cellulose, hemicellulose and lignin) polysaccharides and hemicellulose arabinoxylans (xylan backbone coupled with arabinose, rhamnose and galacturonic acid residues) (12).
- **Others:** Fatty acids, amino acids, minerals, sugars (12); alkaloids, tannins, saponins, flavonoids and phenols (13).

Alexandrian Senna

- **Anthraquinones:** Sennosides A and B, sennosides C and D (14), aloe-emodin glucoside, rhein-8-monoglucoside, rhein 8-diglucoside, sennidin (15,16).
- **Naphthalene glucoside:** 6-Hydroxymusicin glucoside (17).
- **Flavonoids:** Mostly as mono- and di-*O*-glycosides of quercetin, kaempferol and isorhamnetin (15).

4. Medicinal uses (Indications)

For short term use in cases of constipation.

5. Herbal preparations correlated to medicinal use

Combination of ispaghula seeds, ispaghula husk and senna powder.

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

6. Posology and method of administration correlated to medicinal use



Adults and elderly

- Combination of 2.6 – 5.2 gm ispaghula seeds, 0.11 – 0.22 gm ispaghula husk, (0.34/0.66 gm – 0.68 /1.32 gm) senna powder, daily.
- Normally, it will be sufficient to take this medicinal product twice or three times a week.
- to be taken with plenty of liquid about one hour after the evening meal.
- The correct individual dose is the smallest required to produce a soft-formed stool.

Duration of use:

- The effect occurs after 8 to 12 hours.
- The medicinal product should not be used for longer than 1 week.
- 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.

- The medicinal product should be swallowed unchewed in an upright position with plenty of liquid (a quarter of a liter).
- When other medicinal products are used concomitantly, it is recommended to take this product 30 minutes to one hour later.
- The medicinal product should ideally be taken after the evening meal, and not immediately before going to bed.

7. Contraindications (7-9)

- Hypersensitivity to the active substance(s) and to other plants of the same families,
- In case of a sudden change in bowel movement habits lasting for more than two weeks (7-9).
- In case of unresolved rectal bleeding and missing bowel movement after taking a laxative (7-9).
- Children under 12 years of age (18,19).
- Esophageal and cardia disorders (7-9).



- Pathological stenosis in the gastrointestinal tract or the oesophagus leus or atonia of the intestine, or megacolon syndrome (7-9).
- Acute inflammatory bowel disease, such as Crohn's disease, ulcerative colitis, appendicitis; abdominal pain of unknown origin (18,19).
- Dysphagia
- Severe dehydration states with water and electrolyte depletion

8. Special warnings and precautions for use (7-9)

- If any cardiac glycosides, anti-arrhythmic agents, medicines eventually leading to QT interval prolongation, diuretics, adrenocortical steroids and/or liquorice root are administered concomitantly, the medicinal product shall be taken under medical supervision only.
- Like all laxatives, the medicinal product shall not be taken without consulting a doctor by patients suffering from coprostasis (impaction of the faeces) or undiagnosed acute or persisting intestinal disorders (such as abdominal pain, nausea and vomiting) because these symptoms may be signs of impending or existing ileus.
- In order to reduce the risk of ileus, medicines inhibiting the bowel function (such as opiates) shall be taken in combination with the medicinal product under medical supervision only.
- If laxatives need to be used every day, the cause of constipation should be determined. Long-term use of laxatives (for more than a week) should be avoided.
- Any intake of laxatives beyond the recommended treatment period may worsen bowel function and lead to laxative addiction (18). The medicinal product should only be used if constipation cannot be resolved by means of changes in diet or the administration of bulk forming agents.
- If constipation cannot be resolved within 3 days, or if abdominal pain occurs in case of irregular bowel movement, use of the medicinal product should be stopped and a doctor shall be consulted.
- Patients with kidney disease should pay special attention to any disorders in the electrolyte balance.



- Abuse use may lead to loss of fluids and electrolytes, which should be replaced.
- When using the medicinal product, attention shall be paid to drink an abundant amount of liquids. Without an ample intake of fluids, the medicinal product may swell and block the pharynx or esophagus thus probably leading to choking fits.
- Supportive treatment should include the intake of larger quantities of liquid. The electrolyte level - in particular the potassium level - should be monitored. This is particularly important in case of elderly patients.

9. Interactions with other medicinal products and other forms of interaction (7-9)

- In case of chronic use/abuse, potassium deficiency may increase the action of cardiac glycosides and may cause an interaction with anti-arrhythmic agents and medicines used for cardioversion (e.g. quinidine) as well as products leading to QT interval prolongation. Potassium loss may be aggravated by combination with diuretics, adrenocortical steroids and liquorice root.
- The absorption of concomitantly administered medicines such as minerals, vitamins (vitamin B12), cardiac glycosides, coumarin derivatives, carbamazepine and lithium may be retarded. Therefore, an interval of 30 minutes up to one hour should always be allowed between taking the medicinal product and other medicines.
- Concomitant use of the medicinal product and thyroid hormones shall require medical monitoring since the thyroid hormone dose may need to be adjusted.
- Diabetic patients will also need medical supervision since adjustment of anti-diabetic therapy may be required.

10. Fertility, pregnancy and lactation

Pregnancy

- Use during pregnancy is contraindicated (20) .

Lactation



- Use during the breast-feeding period is contraindicated since following the administration of anthranoids (20) small amounts of active metabolites (such as rhein) are excreted in human milk (19).

Fertility

- Adequate studies with the medicinal product with regard to fertility are not available.

11. Effects on ability to drive and use machines

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

12. Undesirable effects

- Hypersensitivity reactions such as pruritus, urticaria, localized or generalized exanthema, rhinitis, conjunctivitis, bronchospasm and in isolated cases - anaphylactic shock may occur (7-9).
- Moreover, flatulence, abdominal pain and spasm as well as diarrhoea may be experienced, in particular in patients suffering from irritable bowel syndrome. In general, these complaints are usually caused due to individual overdose and therefore, a dose reduction is necessary (7-9).
- Meteorism may occur mainly in case of insufficient fluid intake that may be associated with the risk of ileus, esophagus obstruction and faecal impaction (7-9).
- In case of long-term use, disorders in the water and electrolyte balance may be developed resulting in albuminuria and haematuria.
- Pigmentation of the intestinal mucosa (Pseudomelanosis coli) may occur which, as a rule, is reversible after discontinuation of the product.
- Metabolites of medicinal product may cause a harmless red-brownish discoloration of urine.



13. Overdose

- Abdominal discomfort, flatulence and intestinal obstruction (7-9).
- Chronic overdose of the medicinal product may lead to toxic hepatitis (19).

14. Relevant biological properties

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

15. Additional information

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16. Date of compilation/last revision

21/05/2026.



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