Consulting in Human Health, Toxicology & Regulatory Affairs

Phytor Ltd.
Consultant: Dr. Yehoshua Maor (Ph.D, M.Sc.,B.Pharm.)
JBP Building – Ein Kerem Campus
9112001 Jerusalem – ISRAEL
Phone: +972-2-6711-911
Fax: +972-153-2-6711-911
e-mail: phytor1@gmail.com

PHYTOR Ltd.
JBP Building – Ein Kerem Campus
Jerusalem 9112001 Israel

Tel: + 972 2 6711911
Fax: +972 1532 6711911
phytor1@gmail.com

Jerusalem, June 9, 2020

Summary for the Product *LADYMEL-DAY*

LADYMEL-DAY is a product from Zuf Globus which aims at balancing the level of female hormones mainly during perimenopause and menopause when hormonal balance can be disrupted. The product is recommended for healthy women during perimenopause and menopause, who wish to modulate the hormonal balance thus helping the woman to cope with symptoms like hot flashes, nervousness and restlessness that are associated with menopause and PMS. *LADYMEL-DAY* components support a healthy female hormonal system and fight agents caused by stress.

The bees' feed utilized for producing *LADYMEL-DAY* is comprised by a unique blend of herbs which are known for their biological activities on the female hormonal system. The biological activities produced by the chemical constituents of these herbs are recorded on the WHO monographs and are corroborated by numerous peer-reviewed scientific publications.
The product is offered in two versions (day and night). The elements of each formula take into consideration the natural biological clock and the female circadian rhythms determining the sleep patterns which involve the control of the production of melatonin.

LADYMEL-DAY herbal components assist to adapt to many and varied environmental and psychological stresses by supporting the female hormonal system during menopause and PMS.

PHYTOR Ltd.
JBP Building – Ein Kerem Campus
Jerusalem 9112001 Israel

Tel: + 972 2 6711911
Fax: +972 1532 6711911
phytor1@gmail.com

The main biological activities of *LADYMEL-DAY* related to its herbal components is listed below:

1) *Trifolium pratense*

The major active chemicals found in *Trifolium pratense* are isoflavones, mainly Genistein and its metabolites Equol, Isoequol and Dehydroequol. These compounds have strong anti-inflammatory as well as estrogenic effects. Different concentrations of isoflavones present in this herb are also associated with a significant increase of thyroid hormones levels in plasma.

2) *Vitex agnus-castus*

Two major group of compounds are found in this plant: Flavonoids (Casticin, Cymaroside and Chrysosplenol D are the major) and Diterpenes (Vitexilactone, Rotundifuran and Vitexlactam A). These herbal compounds are recognized by the monographs to play a role in the symptomatic treatment of gynecological disorders including premenstrual syndrome, menstrual irregularities, dysmenorrhea etc.
In addition, there is evidence that an extract from the fruits may prolong lactation in breastfeeding women.

3) *Matricaria recutita*

This plant's essential oil comprises mainly the compounds chamazulene, α-bisabolol and their related sesquiterpenes. Apigenin is the major flavonoid, constitute up to 8%. These compounds are mainly used for treating gastric and digestive discomfort as well as for the treatment of restlessness and in mild cases of insomnia.

4) Eleutherococcus senticosus

Eleutherococcus senticosus, also called Siberian ginseng, was reported to have adaptogenic/ anti-stress activity and may boost mental performance. In addition, it may stimulate the immune system. *Eleutherococcus senticosus* also shows anti-microbial activity.

PHYTOR Ltd.
JBP Building – Ein Kerem Campus
Jerusalem 9112001 Israel

Tel: + 972 2 6711911
Fax: +972 1532 6711911
phytor1@gmail.com

5) *Calendula officinalis*

The major constituents of this herb are triterpene saponins (2–10%) based on oleanolic acid (i.e. calendulosides) and flavonoids (3-O-glycosides of isorhamnetin and quercetin).

Polysaccharides isolated from Calendula were reported to enhance phagocytosis by human granulocytes, thus supporting the immune system.

6) *Medicago sativa*

There are numerous reports from *in vivo* studies showing that *Medicago sativa* can lower blood cholesterol levels. In addition, it may relieve menopause symptoms.

7) *Mentha piperita*

The two major constituents of this herb are the monoterpenes menthol (30–55%) and menthone (14–32%). Both compounds are known for their biological activity on gastric and digestive discomfort. There are some reports that the essential oil can have analgesic effect as well improving cognitive performance.

8) *Actaea racemosa*

The major constituents include the cycloartanol-based triterpenes acteol, actein, cimigenol and cimicifugoside. Isoflavones were also identified.

Experimental data indicates the effects of these compounds on the female hormonal system. Clinical data support the use of this herb to treat symptoms of menopause such as hot flashes, sleeping disorders and nervousness.

PHYTOR Ltd.
JBP Building – Ein Kerem Campus
Jerusalem 9112001 Israel

Tel: + 972 2 6711911
Fax: +972 1532 6711911
phytor1@gmail.com

Bibliographic References in addition to the WHO monographs regarding the herbal substances in the formula

Csupor D. et al. Vitex Agnus-Castus in Premenstrual Syndrome: A Meta-Analysis of Double-Blind Randomised Controlled Trials. Complement Ther Med. 2019.

Heshmati A. The effect of peppermint (Mentha piperita) capsules on the severity of primary dysmenorrhea. Journal of Herbal Medicine. 2016.

Hong YH. Et al. Phytoestrogenic Compounds in Alfalfa Sprout (Medicago Sativa) Beyond Coumestrol. J Agric Food Chem. 2011.

Kanadys W. et al. Effects of Red Clover (Trifolium Pratense) Isoflavones on the Lipid Profile of Perimenopausal and Postmenopausal women-A Systematic Review and Meta-Analysis. Maturitas. 2020.

Lee YJ. et al. The effects of A. senticosus supplementation on serum lipid profiles, biomarkers of oxidative stress, and lymphocyte DNA damage in postmenopausal women. Biochemical and Biophysical Research Communications. 2008.

Pkhaladze L. et al. Actaea racemosa L. Is More Effective in Combination with Rhodiola rosea L. for Relief of Menopausal Symptoms: A Randomized, Double-Blind, Placebo-Controlled Study. Pharmaceuticals. 2020.

Saghafi N. et al. Effectiveness of Matricaria Chamomilla (Chamomile) Extract on Pain Control of Cyclic Mastalgia: A Double-Blind Randomised Controlled Trial. J Obstet Gynaecol. 2018.

Tedeschi C., and Benvenuti C. Comparison of Vaginal Gel Isoflavones Versus No Topical Treatment in Vaginal Dystrophy: Results of a Preliminary Prospective Study. Gynecol Endocrinol. 2012 Aug;28(8):652-4. 2012.