



# Red Clover

Botanical Extract



# Red Clover

## Red Clover IFL 40

Standardized and refined dry extract of the aerial parts of *Trifolium pratense* (between 36.0% and 44.0% total isoflavones)





## Uses

Linnea's Red Clover extract is a unique source of the four major isoflavones. It is standardized to contain a fixed ratio of: **Formononetin, Biochanin, Daidzein and Genistein**. Isoflavones have both oestrogenic and anti-oestrogenic effects on metabolism, depending on the endogenous hormonal concentration

Red-Clover dietary isoflavones are the most appropriate non-hormonal treatment for women experiencing **menopausal symptoms**. The medication is also recommended for patients for whom HRT is contraindicated, or simply prefer not to use this therapy

Considering the phytoestrogen-rich composition and the antioxidant activity of red clover, the extract may play a role in **combating prostate cancer** by reducing the proliferation of hormone-dependent prostate cells and acting as an **antioxidant and free-radical scavenger**

## Key

-  Pharmaceutical (API)
-  Food supplement Ingredient

-  U.S. Pharmacopeia monograph
-  Drug Master File available

## Linnea Extracts

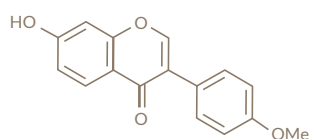
### The philosophy of Excellence

- Native to European plantations in respect of GAP (Good Agricultural Practices)
- The aerial parts are carefully harvested by a selected network of suppliers in Europe
- Linnea inspects every shipment before it leaves
- Every shipment must comply with Linnea's standard of quality

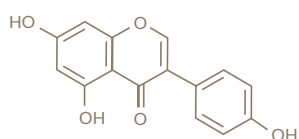


## Technical Description

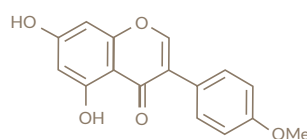
Name of the plant	Trifolium pratense L.
Part of the plant used	Aerial parts
Description	Mixture of isoflavones: Biochanin A, Formononetin, Daidzein and Genistein
CAS number	85085-25-2
Appearance	Dark green amorphous powder
Solubility	Very slightly soluble in methanol and organic solvents Practically insoluble in water
Storage	Preserve in tight container, protected from light, heat and humidity



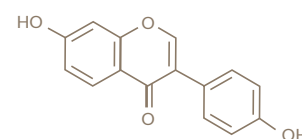
**Formononetin**



**Genistein**



**Biochanin A**



**Daidzein**

## Analytical Description

Identification A, B: TLC	Complies TLC
Identification C: HPLC	Complies HPLC
HPLC assay (dry basis): total isoflavones	Between 36.0% and 44.0%
(Genistein+Biochanin A)/(Daidzein+Formononetin)	Between 0.9 and 1.7
Loss on drying	NMT 3%
Sulphated ash	NMT 4%
Microbiology	2.6.12 Ph Eur, current edition

Complies with the USP monograph on "Powdered Red Clover Extract" current edition

## Discover Linnea's full range of Botanical Products:

 Butylscopolamine

 5-HTP

 Cannabis-Hemp

 Vinpocetine

 HMRLignan™

 Ginkgo biloba

 Vincamine

 Bilberry

 Red Clover

## Linnea's Certificates



High level of compliance with GMPs in product manufacturing

GMP compliance certified by

**swissmedic**

Swiss Agency for Therapeutic Products



GMO free



Allergen, Gluten, Lactose, Melamine Free



Vegan certified



Kosher certified



Halal certified

No materials containing engineered nanomaterial are used in the manufacturing process and the product is not irradiated. The raw material, intermediates and auxiliary compounds are free from pesticides, dioxin and aflatoxins.

Manufactured by

  
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Natural Pharma Solutions

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