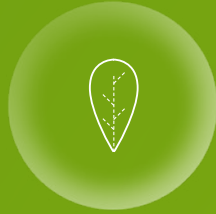




COMPANY PROFILE
& PRODUCT GUIDE

MISSION



Linnea's mission is to improve the quality of life by manufacturing and supplying great natural solutions worldwide, doing business responsibly.

COMMITMENT



Linnea is committed to working with respect for the environment, for the local community, for its clients, and employees.

PROMISE



High-quality botanical extracts, isolates and semi-synthetics, and consultancy services that are tailored to the specific needs all over the world: that is the Linnea promise.

PORTFOLIO



A selection of pure, high-quality, trusted botanical extracts, isolates and semi-synthetics, Linnea's portfolio is the key to innovative, effective natural solutions.

LINNEA DEVELOPS AND MANUFACTURES BEST-IN-CLASS, BOTANICAL, ACTIVE PHARMACEUTICAL INGREDIENTS IN TICINO, SWITZERLAND.

Since its founding in 1982, Linnea has been committed to continuous improvement and innovation, offering standardized and high quality APIs, created in our GMP facilities, with high levels of control and attention to detail, as well as unique formulations.

Manufactured in Switzerland



MADE BY NATURE, ENHANCED BY LINNEA

Linnea guarantees sustainable and standardized manufacturing process, from the fields to the customer. The highly controlled, standardized, and GMP manufacturing process, combined with rigorous quality controls, result in high-quality active pharmaceutical ingredients.

QUALITY

Linnea's products undergo rigorous quality controls, ensuring best-in class product, with a consistent quality of every batch of product.

INNOVATION

Linnea is committed to continuous improvement & innovation.

CERTIFICATIONS

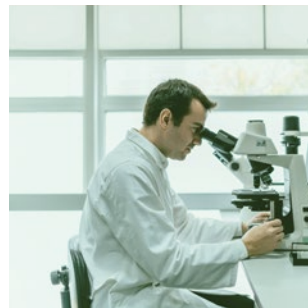
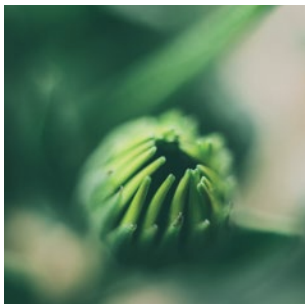
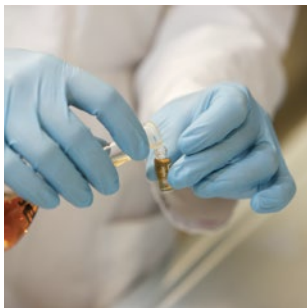
Linnea's botanical Active Pharmaceutical Ingredients are manufactured in our Swiss GMP Facility. Linnea is compliant with the stringent ICH protocols. Production, processes and the end product are fully standardized, which enables Linnea to have consistent and standardized high quality products.



GMP
SITE CERTIFIED



GACP
COMPLIANT



LINNEA'S 5 STEPS OF CERTIFIED EXCELLENCE



Since 1982, Linnea has been committed to the development of best-in-class bioactives. To ensure standardized and consistent quality, we created our own 5-step process.

SOURCING & HARVESTING

01

Linnea is proud to be GACP compliant, and selects only the finest raw materials, from trusted international cultivators.

RESEARCH & DEVELOPMENT

02

Since 1982, Linnea has been committed to continuous improvement & innovation.

MANUFACTURING

03

Linnea's range of products is manufactured in its GMP-certified facilities in Switzerland, following strict, standardized procedures and controls for a consistent quality of the product. Linnea takes great care in sustainable and environmentally responsible manufacturing processes, by implementing ESG considerations now and in the future.

QUALITY ASSURANCE

04

Linnea holds itself to the highest quality standards by having every batch of product undergo a set of GMP-standard quality controls.

DELIVERY & SUPPORT

05

Linnea delivers to over 70+ countries in the world, thanks to its global expertise in pharmaceutical logistics. Linnea's sales and scientific teams provide support from selection of the right APIs, to regulatory assistance to scientific evidence about Linnea's product line.

Linnea®
Butylscopolamine



Linnea®
Red Clover



Linnea®
Cannabinoids



Linnea®
HMRLignan®



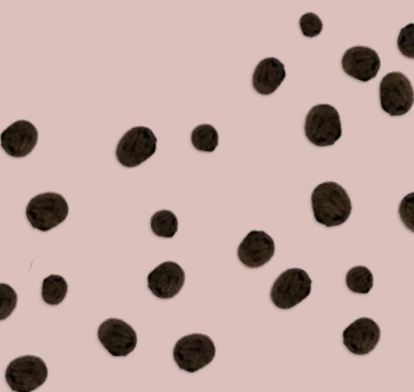
Linnea®
Vinpocetine



Linnea®
Vincamine



Linnea®
5 HTP



Linnea®
Bilberry



Linnea®
Ginkgo Biloba



Linnea® Butylscopolamine

A peripherally-acting antimuscarinic and anticholinergic agent, Linnea has produced Butylscopolamine since 1982. This semi-synthetic derivative is obtained from the leaves of the Duboisia plant in Linnea's plantation in Australia.

PRODUCTS

BUTYLSCOPOLAMINE ORAL GRADE +

Suitable for oral pharmaceutical forms

Semi-synthetic derivative

HYJECT™ | BUTYLSCOPOLAMINE +

Suitable for Injectable

Semi-synthetic derivative

// Non-sterile suitable for injectable pharmaceutical forms

PLANT

Duboisia

PART OF THE PLANT USED

Leaves

APPEARANCE

White or almost white crystalline powder

CAS NUMBER

149-64-4

USES

+ PHARMACEUTICAL

// Smooth-muscle relaxation

// Renal colic pain

// Dysmenorrhea

// Irritable bowel syndrome

COMPLIES WITH PH. EUR.
"HYOSCINE BUTYLBROMIDE"
MONOGRAPH,
CURRENT EDITION



GMP
SITE CERTIFIED



GACP
COMPLIANT

Linnea® Red Clover

Linnea's Red Clover botanical extract is extracted using a unique formula, consistent through every batch. Linnea thus ensures consistent quality and standardization of Red Clover.

PRODUCTS

RED CLOVER

Dry extract of the aerial parts of isoflavone aglycones

// Total isoflavone aglycones: 36.0% - 44.0%



PLANT

Trifolium pratense L.

PART OF THE PLANT USED

Aerial parts

APPEARANCE

Dark green, amorphous powder

CAS NUMBER

85085-25-2

USES

+ PHARMACEUTICAL

// Climacteric symptoms

// Menopause symptoms

DIETARY INGREDIENTS

// Hot flashes reduction
(natural alternative to HRT - hormone replacement therapy)

// Menopause ailments

// Antioxidant and free-radical scavenger

LINNEA HAS A PARTICULAR FORMULA, BALANCING THE MAIN FOUR RED CLOVER ISOFLAVONES. THE RATIO IS FIXED, ENSURING CONSISTENT, HIGH-QUALITY RESULTS AND A WELL-DEFINED ACTIVITY AND EFFICACY

LINNEA WAS THE SPONSOR OF THE USP MONOGRAPH "RED CLOVER AERIAL PARTS ISOFLAVONE AGLYCONES DRY EXTRACT"

UNIQUE EXTRACTION METHOD

BATCH-TO-BATCH CONSISTENCY OF THE FOUR MAIN ISOFLAVONES



GMP SITE CERTIFIED



GACP COMPLIANT

Linnea® HMRLignan®

HMRLignan® is extracted from the Picea abies L. (Norway Spruce) plant. The raw material is harvested in a sustainable way, working with local forestry commissions and authorities. Linnea has a special extraction method and its HMRLignan® has a unique activity as a result.

PRODUCTS

HMRLIGNAN®

Norway Spruce Lignans

// 7-hydroxymatairesinol in aglycone form, co-crystallized with potassium acetate



PLANT

Picea abies

PART OF THE PLANT USED

Wood knots

APPEARANCE

Off-white crystalline powder

USES

DIETARY INGREDIENTS

// Antioxidant and antidegenerative

// Hot flashes in menopause

// Metabolic syndrome and cardiovascular diseases adjuvant

// Neuroinflammation and brain aging

// Connective tissues densifier

(Collagen, elastin and hyaluronic acid enhancer)

TRADEMARKED AND PATENTED

SUSTAINABLE FORESTS TO PROTECT NATURAL HERITAGE

STANDARDIZED SPRUCE KNOT SELECTION

HMRLIGNAN-RICH TREES ONLY

SHORT SUPPLY CHAIN FOR EXCELLENT QUALITY



in progress



GMP SITE CERTIFIED



GACP COMPLIANT



Linnea® Vinpocetine

Linnea's Vinpocetine is a semi-synthetic derivative, extracted using a proven method, vetted with in-house GMP-standard quality controls, resulting in a high-quality profile and outstanding therapeutic value end product. Linnea's Vinpocetine is compliant with the European Pharmacopoeia and is CEP certified.

PRODUCTS

VINPOCETINE ORAL GRADE  +
Semi-synthetic derivative
// Suitable for oral pharmaceutical forms

VINJECT™ | VINPOCETINE +
Suitable for injectable | Semi-Synthetic Derivative
// Non-sterile suitable for injectable pharmaceutical forms

PLANT

Voacanga africana

PART OF THE PLANT USED

Seeds

APPEARANCE

White or slightly yellow crystalline powder

CAS NUMBER

42971-09-5

USES

+ PHARMACEUTICAL

- // Cerebrovascular disorders
- // Degenerative senile cerebral dysfunction
- // Peripheral vasodilatation and cerebral flow increasing
- // Acute and chronic cerebral circulatory disfunctions

DIETARY INGREDIENTS

- // Concentration and memory
- // Neuroprotection and brain aging

SUSTAINABLE, NO RISK
OF DEFORESTATION

COMPLIES WITH PH. EUR.
"VINPOCETINE" MONOGRAPH,
CURRENT EDITION


PURITY GRADE BETWEEN
98.5% AND 101.5%



Linnea® Vincamine

Vincamine is a semi-synthetic derivative, extracted using a proprietary method to Linnea, vetted to GMP-standard quality controls, obtaining a state-of-the-art product. Vincamine is CEP certified, and complies with PH.Eur. monograph "Vincamine", that Linnea developed.

PRODUCTS

VINCAMINE  +
Semi-synthetic derivative

PLANT

Voacanga africana

PART OF THE PLANT USED

Seeds

APPEARANCE

White or almost white crystalline powder

CAS NUMBER

1617-90-9

USES

+ PHARMACEUTICAL

- // Cerebral circulation modulation
- // Dizziness, vertigo (Meniere's disease)

DIETARY INGREDIENTS

- // Brain performance (anti-hypoxic activity) and neuroprotective effect
- // Concentration and memory
- // Physical performance

SUSTAINABLE, NO RISK
OF DEFORESTATION

COMPLIES WITH PH. EUR.
"VINCAMINE" MONOGRAPH,
CURRENT EDITION

PURITY GRADE BETWEEN
99.0% AND 101%



Linnea® 5 HTP

5-hydroxytryptophan is an amino-acid with nootropic and antidepressant actions, naturally present in the brain and found in food in small doses. Exogenous therapeutic 5 HTP is isolated from the seeds of the African plant *Griffonia simplicifolia*.

PRODUCTS

WILD HARVESTED |

L-5-HYDROXYTRYPTOPHAN



Isolated

// L-5- Hydroxytryptophan: NLT 99.0% - 101.0%

PLANT

Griffonia simplicifolia

PART OF THE PLANT USED

Seeds

APPEARANCE

White to grey, white powder

CAS NUMBER

4350-09-8

USES

+ PHARMACEUTICAL

- // Insomnia
- // Post-anoxic myoclonus
- // Anxiety and depression
- // Migraines

DIETARY INGREDIENTS

- // Sleep improvement
- // Promotion of positive moods and emotions
- // Appetite control and adherence to slimming programs



Linnea® Bilberry

Grown in forests in Northern Europe, our antioxidant-rich bilberries are transformed into GMP certified and approved dry extracts.

PRODUCTS

BILBERRY FRUIT DRY EXTRACT EP



Fresh Bilberry Fruit Dry Extract, refined and standardized

// Anthocyanins: 32.4% - 39.6%

POWDERED BILBERRY EXTRACT USP



Powdered Bilberry Extract

// Anthocyanosides: NLT 36%

PLANT

Vaccinium myrtillus L.

PART OF THE PLANT USED

Berries

APPEARANCE

Dark-violet amorphous and hygroscopic powder

CAS NUMBER

84082-34-8

USES

+ PHARMACEUTICAL

- // Venous insufficiency
- // Capillary fragility

DIETARY INGREDIENTS

- // Minor venous circulatory disturbances
- // Discomfort and heaviness of legs
- // Vision functionality and eye health
- // Antioxidant

RICH IN ANTIOXIDANTS
AND ACTIVE INGREDIENTS

SUSTAINABLY HARVESTED

SHORT SUPPLY CHAIN
FOR PHYTO-INTEGRITYUNIFORM PARTICLE SIZE
AND GOOD SOLUBILITYEXCELLENT
STABILITY PROFILECOMPLIES WITH PH. EUR.
"FRESH BILBERRY FRUIT
DRY EXTRACT, REFINED
AND STANDARDIZED"
MONOGRAPH, AND USP
"POWDERED BILBERRY
EXTRACT" MONOGRAPH,
CURRENT EDITION

Linnea® Ginkgo Biloba

Linnea's Ginkgo Biloba dry extract is derived in two different methods, allowing to obtain two different products, Ginkgo Biloba EPG 246, and Ginkgo Biloba Ethanol, suitable for pharmaceutical and food applications respectively, with comparable activity.

PRODUCTS

GINKGO BILOBA EPG 246

Refined and quantified dry extract

// Ginkgo flavon glycosides: 22.0% - 27.0%

// Bilobalide: 2.6% - 3.2%

// Ginkgolides A, B and C: 2.8% - 3.4%



GINKGO BILOBA ETHANOL

Powdered Ginkgo Extract

// Ginkgo flavon glycosides: NLT 24%

// Bilobalide: 2.6% -3.2%

// Ginkgolides A, B, C, J and Bilobalide: NLT 6%



PLANT

Ginkgo biloba L.

PART OF THE PLANT USED

Leaves

APPEARANCE

Light brown, amorphous powder

CAS NUMBER

90045-36-6

USES

+ PHARMACEUTICAL

// Anti-dementia

// Circulation

DIETARY INGREDIENTS

// Memory loss and concentration disorders

// Minor circulatory disorders

NATURALLY RICH IN
INGREDIENTS WITH
OUTSTANDING
THERAPEUTIC VALUE

COMPLIES WITH
PH.EUR MONOGRAPH
"GINKGO DRY EXTRACT
REFINED AND QUANTIFIED",
CURRENT EDITION



A treasure trove of active ingredients just waiting to be rediscovered. Linnea's therapeutic Cannabinoid solutions are the culmination of more than four decades of experience and unrivaled attention to quality.



Cannabinoid Extracts
CBD 5%
CBG 5%



Cannabinoid Dilutions
CBD 20%



Cannabinoid Isolates
CBD 99%**
CBG 99%** ***



Niosome Cosmetic Ingredients
CBD 1%
CBD 5%



PLANT

Cannabis Sativa L.

PART OF THE PLANT USED

Aerial parts

USES

+ PHARMACEUTICAL DIETARY INGREDIENTS

COSMETIC INGREDIENTS

* Information about Linnea's THC products for medicinal and pharmaceutical purposes can and will be provided only to healthcare professionals and business partners, upon request and only after being vetted by Linnea's team for the due credentials to obtain said information.

** Specification: 98.0% - 102.0%

*** Pharma grade CBG isolate under development.



READY MADE FORM SOLUTIONS

Cannabinoid Extracts
CBD 5% +
CBG 5%

Cannabinoid Dilutions
CBD 20% +

Thanks to Linnea's network of reliable partners, we offer assistance in the development of ready-made therapeutic Cannabinoid-based products, with packaging, (vials, labels and inserts) tailored to the client's specifications.

LINNEA'S CBD IS COMPLIANT WITH THE PH.EUR. CBD MONOGRAPH

LINNEA HOLDS A GID CERTIFICATE ISSUED BY SWISSMEDIC

STANDARDIZED, ENSURING SAFETY AND EFFICACY

SUSTAINABILITY & GREEN SPIRIT

Linnea holds itself to the highest ethical and quality standards, making ESG a key pillar in its everyday operations and reducing the company's environmental impact to a minimum.

Linnea is committed to doing business responsibly, make a positive impact on the environment and provide the best that nature has to offer.

By building a **biogas plant** in collaboration with local farmers in the Swiss canton of Ticino, we have been able to not only prevent waste from ending up in a landfill, but convert it into energy.

The biogas plant has produced impressive amounts of both heat and energy since it opened.

Linnea also adheres to the **Swiss Private Sector Energy Agency Program**, to reduce carbon dioxide emissions and energy consumption.

OUR VIRTUOUS CIRCLE: GIVING BACK TO MOTHER NATURE



MANUFACTURED
IN SWITZERLAND



Linnea sa has been rated silver by Ecovadis Business Sustainability Ratings.

Manufactured
in Switzerland 

 TRUST AND
EXPERIENCE

 GMP
SITE CERTIFIED

 GMO FREE

 GACP
COMPLIANT

 GREEN
SPIRIT

 HACCP INTERNATIONAL
STANDARDS COMPLIANT


 VEGAN

 ALLERGEN FREE

 HALAL

 KOSHER

 LINNEA'S 5 STEPS OF
CERTIFIED EXCELLENCE

 FOCUS ON RESEARCH

 SHORT SUPPLY CHAIN

 70+
COUNTRIES REACHED

 300+
CLIENTS PER YEAR

 GID AUTHORIZATION
CERTIFIED BY SWISSMEDIC

PLEASE NOTE THAT THIS DOCUMENT IS
NOT MEANT FOR CONSUMERS, AS THE
INFORMATION CONTAINED HEREIN DOES
NOT REFER TO FINISHED PRODUCTS.

THE IMAGES ARE FOR
ILLUSTRATIVE PURPOSES ONLY
AND MAY NOT REPRESENT REALITY.

LINNEA® CANNABINOIDS IS
A PROJECT BY LINNEA SA.

BE SURE TO CHECK THE LAWS
REGULATING CANNABIS IN YOUR
COUNTRY AND/OR THE COUNTRY
WHERE THE PRODUCT IS TO BE SOLD.
THE COMMUNICATION ON THC PRODUCTS
IS NOT INTENDED FOR THE GENERAL
PUBLIC AND THE PRODUCTS CONTAINING
A LEVEL OF THC HIGHER THAN 1% ARE
SUBJECT TO SUPERVISION UNDER THE
SWISS FEDERAL LAW ON NARCOTIC
SUBSTANCES.

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Natural Pharma Solutions

LINNEA SA
VIA CANTONALE 123
6595 RIAZZINO
SWITZERLAND

T +41 91 850 5050
F +41 91 850 5070
sales@linnea.ch

Manufactured in Switzerland



since 1982 TRUST AND EXPERIENCE

GMP SITE CERTIFIED

GMO FREE

GACP COMPLIANT

GREEN SPIRIT

HACCP INTERNATIONAL STANDARDS COMPLIANT

VEGAN

ALLERGEN FREE

HALAL

KOSHER

LINNEA'S 5 STEPS OF CERTIFIED EXCELLENCE

FOCUS ON RESEARCH

SHORT SUPPLY CHAIN

70+ COUNTRIES REACHED

300+ CLIENTS PER YEAR

GID AUTHORIZATION CERTIFIED BY SWISSMEDIC

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IMPROVING LIVES WITH TRUSTWORTHY INGREDIENTS

OUR SELECTED BOTANICAL INGREDIENTS FOR YOUR INNOVATIVE NATURAL SOLUTIONS

	Linnea® Ginkgo Biloba	Linnea® Red Clover	Linnea® 5 HTP	Linnea® HMRIignan®	Linnea® Bilberry	Linnea® Butylscopolamine	Linnea® Vinpocetine	Linnea® Vincamine	Linnea® Cannabinoids
PHARMACEUTICAL INGREDIENTS	■	■	■		■	■	■	■	■
DIETARY INGREDIENTS	■	■	■	■ ***	■		■	■	■ ****
COSMETIC INGREDIENTS									■
SUITABLE FOR INJECTABLES						■	■		
GMP	■	■	■	■	■	■	■	■	■
DMF	■	■	■		■	■	■	■	■
CEP						■	■	■ **	
PH. EUR.	■				■	■	■	■	■ *****
USP	■ *	■		■ **					

* Compliant with US limits, but not methods. ** In progress. *** Novel Food Registration in process in the EU.

**** Novel Food Applications in process for the EU and UK. ***** Ph.Eur. is available only for CBD.



linnea.ch
linneacannabinoids.ch



 **Linnea**[®]
Natural Pharma Solutions