

All about Iscador AG

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Welcome to Iscador AG

It has been a few years already since we took over the marketing and distribution of the well-known mistletoe preparations from Weleda AG. With this booklet, we want to give you an overview and maybe even a few new insights about who we are and what we do.

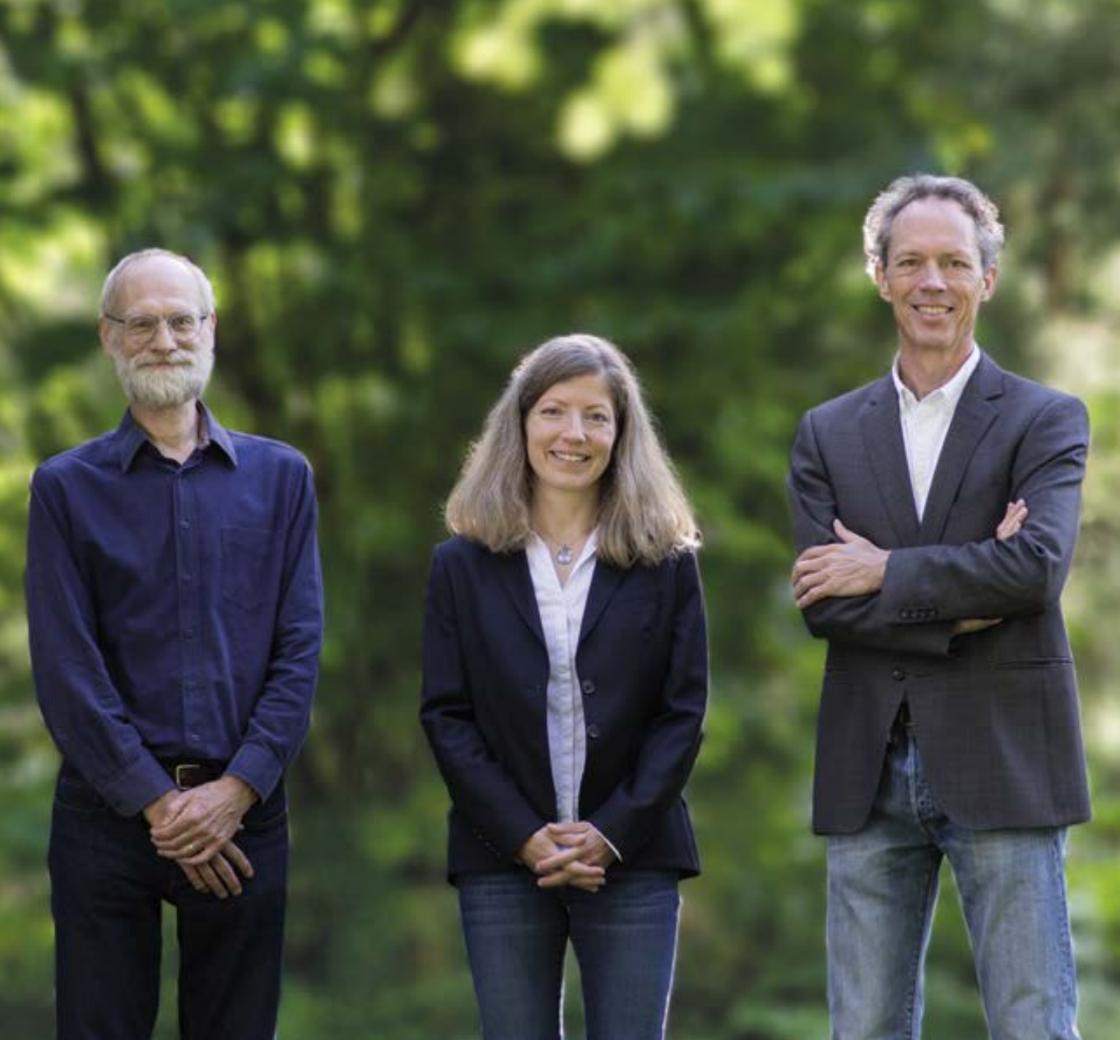
Let us take you on a journey through our history, introduce you to our special manufacturing process and the resulting remedies, as well as our long research tradition. We want to share all our experience and dedication with you.

Supporting people who are affected by cancer – this is what we strive for every day. Both patients and medical professionals are in the focus of our attention. We are delighted about every success we can achieve together and this gives us even more motivation and inspiration to pursue our idea of integrative cancer treatment and to stand by your side for further support.

We are pleased to be here for you if you have any questions and look forward to your suggestions and feedback. Only with your help, we can continue to grow and develop.

Kind regards

Iscador AG Executive Board



Dr. Gerhard Schaller
Member of the Executive Board,
Manufacturing

«Our production includes all steps, from plant cultivation and harvest up to the distribution of the manufactured remedies.»

Sarah Monz
Member of the Executive Board,
Medicine & Communications

«We combine medical knowledge with competent customer service.»

Dr. Stephan Baumgartner
Member of the Executive Board,
Research & Development

«We develop pharmaceuticals for the oncological field based on anthroposophical and integrative medicine.»

Once upon a time...

«ISCADOR, that's Weleda, right?»
Not anymore – but here is how it
all happened.



Dr. phil. Rudolf Steiner
(1861–1925)



Dr. med. Ita Wegman
(1876–1943)

1917

From Rudolf Steiner and Ita Wegman...

It all started at the beginning of the 20th century with Rudolf Steiner's suggestion to use mistletoe for cancer treatment. Based on this, the physician Ita Wegman developed the first mistletoe preparation «Iscar» together with the pharmacist Adolf Hauser in 1917. She soon started to see positive effects and observed that her patients «regained their courage to face life again».

Based on Rudolf Steiner's further suggestions and Ita Wegman's research, the knowledge about the effects and the production of mistletoe remedies grew steadily. The methods developed back then still define our preparations nowadays: The mistletoe harvest in summer and winter from different host trees,

the blending of the summer and winter extracts on a special machine, the use of fermentation as a way to naturally conserve the components without using alcohol, and the reinforcement of the mistletoe properties through the addition of metal salts.

1935

...to the Society for Cancer Research (Verein für Krebsforschung VfK) ...

In 1935, the Society for Cancer Research (VfK) was founded to take care of any further research in this field. It has been based at the Hiscia Institute in Arlesheim since 1949, which still cultivates the same pioneering spirit of the early days.

A good example is the machine for the blending of the mistletoe preparations designed according to Rudolf Steiner's idea. The first machine was installed in 1928 and was continuously developed until finally, in 1972, Machine 6 succeeded in meeting Steiner's technical requirements.



Hiscia Institute in 1952



*Back in the
good old times*

...but also nowadays, we harvest all
our plants by hand.



Up in the trees

We carefully harvest our mistletoes twice a year

Twice a year, the summer and winter extracts of the manually harvested mistletoes are blended in a complex rotation procedure, thus enhancing the effect of mistletoe as a medicinal product for cancer treatment.

Not only research but also the entire production process of our remedies took place at Hiscia Institute in Arlesheim.

2015

... and to Iscador AG

The cooperation between VfK and Weleda AG started in 1970 with Weleda taking care of the marketing and worldwide distribution of ISCADOR until 2013. When the collaboration ended, the VfK decided to take over the responsibility for all business units and founded Iscador AG as a new organisation.

Since 2015, Iscador AG has been managing all operational activities, including the marketing and worldwide distribution of the remedies. The employees and production facilities were integrated into the new organisation, and the long tradition of production and research of Hiscia Institute still lives on in Iscador AG. Every day, our employees contribute all their experience and enthusiasm to improve the quality of life for cancer patients. We are pleased to give you an insight and share our passion with you on one of our guided tours on our premises in Arlesheim.



2015
Iscador AG



1972
Machine 6

1949
Hiscia Institute

1935
Society for Cancer Research



1926
ISCADOR

1917
Iscar

From harvest to medicine

Contact us for a guided tour or watch the video: www.iscador.com/manufacture

Biology of mistletoe

For centuries, mistletoe has been used as a medicinal plant for various health issues. But how did it become part of cancer therapy?

Its special botanical characteristics gave Rudolf Steiner the initial idea and were essential for the further development of anthroposophical mistletoe pharmaceuticals. Over the past hundred years, various studies were conducted to understand the therapeutic properties of this truly unique plant.

Dependent and emancipated

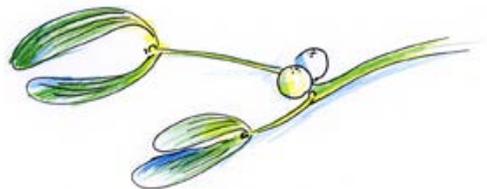
Mistletoes grow very slowly. Each twig only consists of a stalk with a pair of leaves and a short shoot, where the blossoms will open in the following winter and white berries will ripen in late autumn. Each year, one new stalk grows, which makes it easy to determine the age of a mistletoe bush.

Mistletoe's tendency to form most of its organs differently than other plants reflects its special pharmacological characteristics. It does not develop any roots and fully depends on its host tree for nutrition. Additionally, mistletoe leaves do not have the usual structure for optimal photosynthesis. Therefore, each plant is charac-

terised by its host tree. A mistletoe bush could not exist without its host tree and the nutrients it receives and absorbs from it. Consequently, mistletoe also contains different pharmacological constituents depending on its specific host tree.

Mistletoe lectins and viscotoxins

According to research, two substances seem to be most important for mistletoe's use in cancer therapy: Viscotoxins and mistletoe lectins. Both are protein substances produced by the mistletoe.



Their concentration varies according to the subspecies of mistletoe, the season and the host tree it grows on.

Viscotoxins reach their highest concentration in summer in the young, outer leaves, mistletoe lectins on the other hand in winter and in the older stems in the centre of the bush. Based on this knowledge, we harvest twice a year, in summer and in winter, to balance the levels of these protein substances. In winter, we also harvest the ripe white mistletoe berries.

More information...

...about mistletoe's pharmacological characteristics and the effects of its substances are available for medical specialist in the professionals section on our website.



Hidden beauty

Mistletoe is dioecious, which means there are male and female plants.

From harvest to medicine

All plants for our remedies grow in Switzerland, Germany and France. When we harvest them, we strongly focus on the highest pharmaceutical quality and on sustainability, in order to secure supplies in times of climate change.

Decades of planning

Our most important asset are healthy trees on various wild sites and in cultivated areas, which are regularly checked and carefully tended to by our employees.

To support the mistletoe population, mistletoe seeds are placed on the young branches in the tree crown. It takes several years for them to grow into large mistletoe bushes. Later, birds take over the further spread by eating the berries and thus freeing the seeds.

It is all about quality

There is a lot of manual work involved, from cultivation to harvest up to the assembling of each individual package. Additionally, we use complex machines and production lines. All our processes are subject to the strict guidelines of Good Agriculture and Good Manufacturing Practice (GAP/GMP).

Time for harvest

Every summer and winter, our employees climb up high into the trees to pick mistletoes. We strictly separate the mistletoes from different host trees. To achieve a balanced ratio of the mistletoe proteins, we harvest summer mistletoe in June, when the plants contain high levels of viscotoxins. Around December, the concentration of mistletoe lectins reaches its peak: It is time for our winter harvest.

We use the plant parts that are up to two years old, i.e. stems, leaves, flower buds, and in winter also the ripe mistletoe berries. Up in the trees, we carefully stow the plants in sacks and never let them touch the ground. In refrigerated vans, we transfer the mistletoes to their destination, Arlesheim in Switzerland, where we directly process them.

Did you know...

... that mistletoe needs to grow for 12 to 15 years until it can be harvested?



Icelandic moss

To harvest the lichen «Icelandic moss», we even climb up mountains and collect it by hand. We further process it into the remedy «Cetraria Praeparata».

Extraction

At our headquarters in Arlesheim, everything comes together: The plants meet decades of experience in the production of anthroposophical medicine, supported by thorough research and state-of-art pharmaceutical technology.

Our employees carefully sort the freshly harvested mistletoes by hand. The plant parts are then crushed with a roller and mixed with distilled water. Added lactic acid-forming bacteria and sugar initiate fermentation. After this process is finished, the different extracts produced from summer or winter mistletoes are pressed, germ-filtered and stored in a cool and dark place until it is time for our machine process.

Machine process

The heart of our production



Summer

The summer extract contains many viscotoxins, whereas the concentration of mistletoe lectins rises in winter.



Winter

The winter extract consists of the stems and leaves as well as the white mistletoe berries.



Machine

Since 1928, the machine was continuously developed according to Rudolf Steiner's ideas. Today, we use machine no. 7, which has been in operation since 1987.



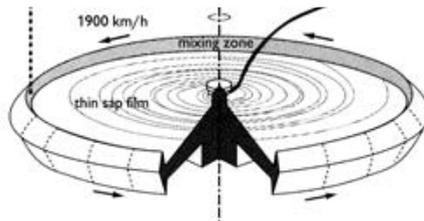
Rotation process

The summer extract falls down vertically in single drops, whereas the winter extract spreads out horizontally on a rotating titanium plate (10'000 revolutions/minute). The actual active substance evolves from this intense mix of summer and winter extracts.

Mistletoe summer extract, single drops falling down vertically

Rotating titanium plate (10'000 revolutions/minute)

Mistletoe winter extract, spreading out horizontally from the centre of the plate



Ampoules

Finally, the product concentrate is diluted with isotonic solution, sterile filtered, filled into ampoules and packaged by hand.

In a similar way, the lichen Icelandic moss is processed for the product *Cetraria praeeparata*. But first, the dried plant parts are rhythmically mixed for seven days. This means that the solution is stirred each morning and evening at 37 °C and exposed to light in an ice bath at sunrise and sunset. Afterwards, these extracts are also pressed and germ-filtered, before they undergo the machine process described on the previous page.

Distribution

From Arlesheim to the world: We do not only supply Switzerland and Germany. Our partners help us to bring integrative cancer treatment to medical professionals and patients all over the world and to support them on their journey.

Step by step

Watch our video to follow mistletoe from harvest to the ampoule:
www.iscador.com/manufacture



Our preparations

It all started more than 100 years ago with Ita Wegman's first mistletoe preparation «Iscar». Thanks to ongoing research over decades, it has been developed into the preparations we use today. Our wide range of host trees, dosages and a product line with added metal salts help us to respond to various patients' needs.

Mistletoe Injections

- ISCADOR M (Malus = Apple tree)
- ISCADOR Qu (Quercus = Oak)
- ISCADOR U c. Hg (Ulmus = Elm)
- ISCADOR P (Pinus = Pine)
- ISCADOR A (Abies = Fir)

Mistletoe Drops

Our aqueous mistletoe drops for oral use are based on the same formula:

- Viscum Mali praeparatum
- Viscum Pini praeparatum
- Viscum Quercus praeparatum

Cetraria praeparata

In addition to the mistletoe remedies, we also produce a preparation from Icelandic moss (lat. *Cetraria islandica*). The plant is known for its soothing effect on mucous membrane irritation and for its antioxidant and anti-inflammatory properties. The aqueous extract is rich in polysaccharides, which can complement mistletoe therapy.

Viscum album Herba Extractum resinosum 10%, Crème

Our latest development is a mistletoe cream, making the fat-soluble components of pine mistletoe available in a medicinal formula for the first time, suited for external use on oncological skin lesions.

Please note that the range of available products may vary in different countries. Patients should always consult with their attending healthcare professional prior to treatment to discuss therapeutic options.



*Nature and science
at their best*

Our scientists constantly research the use of mistletoe and other plants as medicinal products.



A generous host

Not all oak trees are as mistletoe-friendly as this one.

Mistletoes' host trees

There are over 1'000 mistletoe species worldwide. Among them, the white-berried European mistletoe (*Viscum album* L.) has the widest range of potential host trees. Three subspecies can be found in Central Europe: hardwood mistletoe on various deciduous trees (such as apple tree, elm and oak), pine mistletoe and fir mistletoe.

Rudolf Steiner and Ita Wegman already experimented with mistletoes from different host trees, starting from apple trees to pines and firs to the mighty oaks. We still focus on them for our remedies today. Later, we added elm, which rarely carries mistletoe and needs to be tended carefully, as a host tree for specific needs.

Mistletoe does not develop any roots and connects itself to the liquid system of its host tree. This way, it receives the nutrients dissolved in it. The tree either absorbs them from the earth as minerals or forms them itself as organic substances, and stores them in its roots. In doing so, it provides nutrition to the mistletoe.

According to Rudolf Steiner and Ita Wegman, the host tree influences a mistletoes' pharmaceutical characteristic and therefore its suitability for treating specific types of tumours.

On the following pages, you can find out more about our host trees.



Did you know...

...that an exposed mistletoe seed clings to the branch with the help of so-called «mistletoe glue», thus starting a new mistletoe bush?



Sweetheart

Bees are not the only ones who love the sweet apple blossoms.



Apple tree mistletoe

Subspecies:

Hardwood mistletoe

Host tree:

Apple tree (lat. *Malus*)

Scope of ingredients:

It shows a balanced ratio of lectins and viscotoxins.

Characteristics:

Deciduous trees dynamically convert substances, which can also be seen in the falling leaves in autumn, and therefore show an affinity to the human metabolic system. The lovely blossoms and round, colourful fruits of the apple tree also indicate a strong connection to reproduction processes. These details are significant for the use of this host tree.

For many people, the apple tree with its blossoms in spring, its green leaves in summer and its ripe fruits in autumn also symbolizes the essence of rhythm and life, of awareness and decision.

Apple tree mistletoe was the first to be used in gynaecology by Ita Wegman in 1917, and thus draws from the longest-standing experience in integrative cancer treatment.



Did you know...

...that insects, that are also active in winter, are essential for the pollination of mistletoe?



Resistance

Oak mistletoes are rare, which is the reason why we started to cultivate them many years ago.



Oak mistletoe

Subspecies:

Hardwood mistletoe

Host tree:

Oak (lat. *Quercus*)

Scope of ingredients:

It shows a high content of lectins and viscotoxins.

Characteristics:

In contrast to the apple tree, whose roots mostly stay close to the surface, the oak strives deep into the ground with its taproot system. Strongly connected to the earth, it is also considered a «tree of life»: Oaks become very old and are therefore a symbol for eternal life. They convey a sensation of strength and resilience. Their vast crowns create a habitat for many different animals.

Very few oak trees are friendly towards mistletoe, which presents a major challenge for the cultivation of oak mistletoes. Thanks to decades of research and experience, we are now able to cultivate a large number of mistletoe-friendly oaks. They thrive in climatically suitable locations under optimal soil conditions, making it possible to harvest mistletoe from them regularly.



Did you know...

...that quite a few animals forage on mistletoes? Birds in winter, snails in summer, mice and deer naturally limit the mistletoe population.



Sensitivity

We only process elm mistletoes with mercury sulphate as metal additive.



Elm mistletoe

Subspecies:

Hardwood mistletoe

Host tree:

Elm (lat. *Ulmus*)

Scope of ingredients:

It contains a high concentration of mistletoe lectins and viscotoxins.

Characteristics:

The elm's protruding crown appears light nonetheless. Its branches resemble those of the lungs and bronchi, reflecting its kinship with the respiratory tract.

Elms are extremely sensitive and susceptible to disease, though. As elm mistletoe is practically extinct in nature, we treat the young elms on our cultivated sites very carefully and study them closely to understand their needs in adapting to climate change.

With its subtle power, elm mistletoe is also well suited to support particularly sensitive people.



Did you know...

... that mistletoe therapy is not all about single ingredients? It is rather about their interaction in the overall extract and their suitability for a specific type of tumour and situation.



Resilience

The second subspecies of *Viscum album* lives on pine trees.



Pine mistletoe

Subspecies:

Pine mistletoe

Host tree:

Pine (lat. *Pinus*)

Scope of ingredients:

It contains low levels of viscotoxins and lectins and is therefore usually well tolerated.

Characteristics:

Pines grow quickly, have little demands regarding their environment and can become quite old. With their tall, slender shape, they also leave enough space for the other forest dwellers and like to take themselves back a little. Their wood is stable and they are resistant to adverse conditions.

With this modesty, the pine is venerated through Asia as a symbol for endurance and longevity, but also of great strength and patience.

Thanks to its durability and resilience, however, pine mistletoe is very versatile and can be used for treating various types of tumours.



Did you know...

...that stronger preparations are not necessarily better? The optimal dosage varies for each person and must be identified under medical supervision.



Illumination

Fir mistletoe is the third subspecies
of the European mistletoe.

Fir

This preparation is only available in Switzerland.



Fir mistletoe

Subspecies:

Fir mistletoe

Host tree:

Fir (lat. *Abies*)

Scope of ingredients:

It is rather low in lectin and higher in viscotoxins, which makes it generally well tolerated.

Characteristics:

Fir trees impress with their mighty main trunk and their dense, dark green needles, which survive several winters. As evergreen trees, they embody the idea of eternal life and are a symbol of birth and resurrection in many cultures.

Fir trees embody a strong sustentative power. Their needles are flat, unlike pine trees, and bear witness to a strong affinity to sun and light.



Choosing a host tree



Our Infoline for medical professionals supports specialists with individual therapy recommendations and additional information they can pass on to interested patients.
www.iscador.com/contact



*Icelandic moss harvest
in Switzerland*

Hard manual work in a breath-taking environment

Icelandic moss

Apart from mistletoe and its host trees, the lichen «Icelandic Moss» (lat. *Cetraria islandica*) is another important plant for medical preparations. Lichens are a symbiosis of fungi and algae. As with mistletoes, it is all about patience: Icelandic moss grows slowly and preferably in damp, cool locations in the Arctic and Alpine climate, which makes it very resistant.

Unlike mistletoe, Icelandic moss is a ground dweller, making harvesting much easier. Nevertheless, it is all manual work and only possible at certain times of the year. In winter, e.g., the time of harvest depends on the amount of snow in the mountains.

The soothing effect of Icelandic moss is widely known and often used to treat irritations of the mucous membranes, e.g. in throat pastilles or cough syrups. It also has antioxidant and anti-inflammatory properties. Extracts are rich in polysaccharides, which can support the effects of mistletoe therapy.



Did you know...

...that lichens are edible? There are toxic and non-toxic types, similar to their relatives: mushrooms.

Find out more about us

Check our website for more information about integrative cancer treatment, mistletoe therapy, our company and much more.

www.iscador.com



Information material

You can download our brochures directly online. Please note that we are still working on expanding our range of English brochures.



Guided tour

Visit us in Arlesheim to find out more about mistletoes and the production of our remedies.

On the guided tours for specialists, we additionally discuss medical and scientific findings and the current study situation. Please contact us to check the availabilities.



Events

Our calendar gives you an overview of selected professional and public events focusing on integrative cancer therapy.



Follow us ...

... in the step-by-step video
through our production:
www.iscador.com/manufacture



Practice locator

You are looking for a medical specialist who can inform and support you regarding the possibilities of integrative cancer treatment?

Our practice locator shows you specialists and practices in the field of complementary and anthroposophical medicine in your region or worldwide.



Professionals section

Medical professionals can find additional scientific information and documents in the professionals section on our website.

Sustainability and a strong regional focus are very important to us, not only when it comes to our plants. For our long-term partnerships, we prefer smaller companies in Switzerland and Germany. Whenever possible, we use recycled materials – e.g. the booklet in your hands is made of recycled paper – and support social projects in the region and worldwide.



*Fancy our mistletoe
pictures?*

Download and enjoy them on
your wallpaper every day:
www.iscador.com/pictures

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Great care has been taken in compiling the information and recommendations contained in this document to ensure they are in line with the current state of knowledge. Errors and misprints are reserved. Guarantee and liability claims of any kind are excluded.

For better readability, masculine form is used throughout.

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