



ECO WEEDKILLER

For Better Landscaping

INTRODUCTION | 2025

OUR STORY

The story of Eco Weedkiller started in early 2016, when we were looking for hot water device for weed control for Konevel Oy to import. With the use of glyphosate in a headwind, we were looking for an effective and ecological method, but it turned out to be difficult and negotiations with one manufacturer progressed very slowly.

At the 2016 Lepaa exhibition, I saw the first competitor's device myself and said, "We can do that much better ourselves!" The next day, the principal of the Lepaa University of Applied Sciences was already on the phone and the development project for the device got off to a flying start. Emilia Myllykylä quickly got to work on the thesis and found us some research on the use of hot water to control weeds and the mechanism that kills the plant.

After that, the design of the actual device started, which was taken over by Janne Hakkarainen from Savonia University of Applied Sciences. The prototype was quickly created and presented to the public for the first time at the Viherpäivät exhibition in February 2017. In the summer, the device was tested in practice in the Helsinki area and used as a basis for creating production versions.

The first export countries were Switzerland and Germany, where the first devices were delivered in 2019. In addition to these countries, devices are now exported to Denmark, Sweden, the UK and the Netherlands. The first unit has already been delivered to Australia. More than 90% of our production is exported.

Eco Weedkiller Garden, designed for domestic use, was released in 2019. The device was designed in collaboration with Industrial Design students from Savonia University of Applied Sciences.

At the beginning of 2021, Eco Weedkiller's business was transferred to a separate company, EWK Finland Oy. This was done by through a partial demerger from Konevel Oy. The company is owned by Kimmo Kärki and Marko Laakkonen. The company's registered office and production are in the "wonderful Iisalmi", in north Savo, Finland.

In 2025, development and growth continue to be strong!

Kimmo Kärki
CEO & Founder

POWERED BY 100°C WATER



Eco Weedkiller is powered by 100-degree water that comes out of the device in large drops. The large droplet can carry more heat energy, without cooling too much on the way to the ground. In pressure washers, for example, the droplet size is small because it sticks better to dirt. A small droplet releases heat into the environment quickly, resulting in a low weed control efficiency.

The water emitted by both professional and consumer devices is as hot as it can be in liquid form, around 100 degrees Celsius. The effectiveness of water in weed control is based on a sudden high energy dose that causes destruction of the plant's cellular structure. Water has two advantages over other thermal methods: water absorbs a large amount of energy and water can be absorbed into the soil, so that the heat also causes damage to the root system.

The soil is also a great insulator. For example, a forest fire will destroy the visible parts of a plant, but the underground roots will remain undamaged. However, they are not safe from 100°C water. Soil's good insulation also keeps heat in the ground for a long time, which significantly increases control efficiency.



The water must be boiling hot for the treatment to be successful.



The water penetrates the plant's root system, destroying them as well.



100°C water is not a natural threat to plants, they have not developed mechanisms to protect themselves against it.

HOW IT WORKS



1

All you need is water



2

The device heats the water to 100°C



3

Apply the required amount of water to the weeds



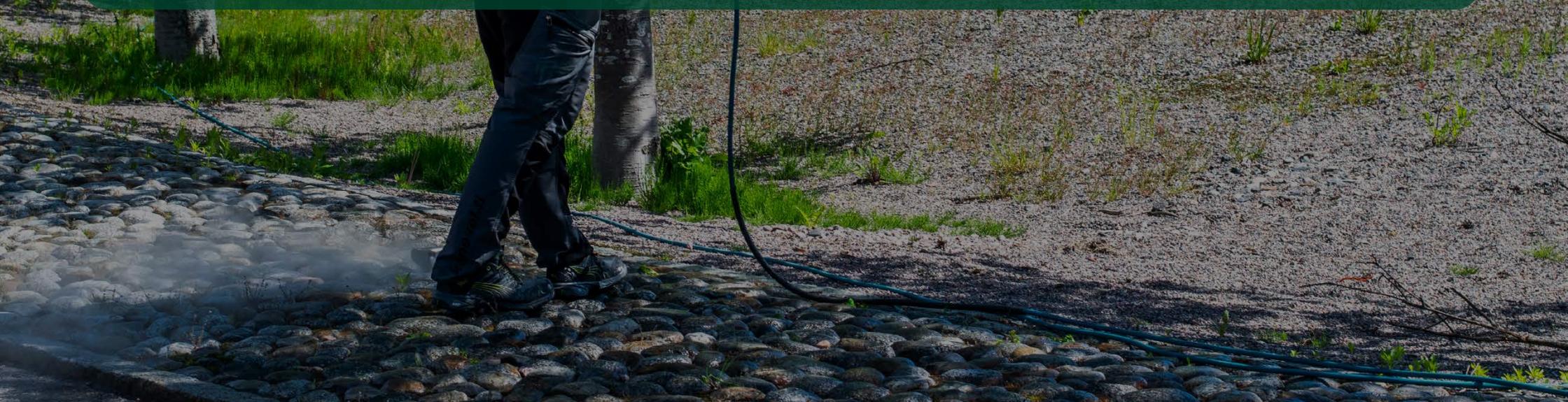
4

Remove the dead plants as needed



5

Repeat 3-4 times yearly to destroy the roots



HOW TO ACHIEVE SUCCESSFUL TREATMENT

- A hissing sound from the nozzle tells you the water is boiling.
- The ground remains steaming after treatment.
- The smell of boiled plants.
- Big-leaved plants react immediately, they bruise quickly. Small-leaved plants and mosses dry out in a few days.

WATER USAGE

Minimum recommended amount	2-3 litres / m ²
Deep-rooted plants or untreated baseline	3-5 litres / m ²
Invasive species and woody plants, e.g. rugosa rose*	10-40 litres / m ²

*To control invasive species such as rugosa rose, calculate the area to be controlled and apply a selected amount of water: 15 m² x 30 l/m² is 450 litres. Our equipment can deliver 6, 10 or 20 litres of water per minute, depending on the model.

CASE: MUNICIPALITY OF TUUSUSLA

In cooperation with the municipality of Tuusula, we treated the test areas with 100°C water during the summer of 2021 and monitored the effect of the treatments on weed growth.

The weeds in Toukkapuisto playground test area consisted mainly of grass, dandelions, and melancholy thistle.

The first treatment was applied at the end of May, and we monitored the plants' response to their new threat throughout the summer. The area was treated three times during the summer, on 28 May, 14 July, and 18 August.

Already after the first treatment, the grasses in the sandy areas were effectively controlled and dandelion numbers in the areas were significantly reduced. As dandelion is an efficient reproductive plant, repeated treatments played an important role in its decline.

In a busy playground, there were many users during the treatments, but as the active substance was only hot water, the areas were still in the use for crowd. The weed treatment attracted a lot of interest from passers-by and park users alike, who were told that the treatment was safe for both humans and animals.



Before the first treatment
28.5.



After the first treatment
31.5.



Before the third treatment
18.8.



After the third treatment
31.8.

PRODUCTS

ELECTRIC DEVICES ⚡



Eco Weedkiller Pro 3SP

For professionals
Electric



Eco Weedkiller Pro SP Mini

For professionals
Electric



Eco Weedkiller Garden

For consumers
Electric

DIESEL POWERED DEVICES ⚙️



Eco Weedkiller Pro 10

For professionals
Diesel



Eco Weedkiller Pro Dual

For professionals
Diesel



Eco Weedkiller Pro 30H

For professionals
Diesel

APPLICATIONS

Diesel-powered devices

- Weed control
- Various hot and cold water pressure washing (grease removal, road marking, graffiti removal, roof washing, etc.)
- Disinfection
- Opening of drains and pipelines
- Thawing works (yard wells, drainpipes)

Electric devices

- Weed control
- Disinfection
- No pressure washing features

DIESEL-POWERED DEVICES

In addition to weed control, diesel-powered devices can also be used for many different types of washing, which is why we call them multifunctional hot water devices.

- Weed control
- High pressure washing with cold or hot water (80 - 90°C)
- Chewing gum removal
- Optional opening hose for opening max. 160 mm drains and thaw frozen drums, rainwater gutters, etc.
- Machine degreasing washes
- Road marking removal
- Washing of traffic signs, lichen removal

Eco Weedkiller Pro comes standard with an 80 m long treatment hose. It allows you to treat up to two hectares in one go, with the unit connected to the water supply system.

Eco Weedkiller Pro 10

The device can be toggled between weed control mode and disinfection mode by a simple switch, and the rest is taken care of by the Eco Weedkiller automation. This ensures that the device is always operated efficiently and within the right parameters.

The equipment may be transported in most vans and trailers fitted with a braking system.

The device has a 400-litre tank, which is enough water for more than an hour of normal use. When the handle is held down continuously, the working time is about 40 minutes.

For professionals
Diesel powered



More information on
www.ecoweedkiller.com



High pressure washing with cold or hot water (80 – 90°C).



Along with weed control, you can also disinfect e.g. benches and trash cans.



The device can be connected to the water supply system or to additional tanks.

USERS	1
POWER SUPPLY	Kubota Z482 diesel engine Diesel fuel heater 93 kW
OUTPUT	Weed control: 10 l/min (99-101°C) Pressure wash & disinfection: 150 bar, 15 l/min (70-75°C)
FUEL CONSUMPTION	10 l/h
DIMENSIONS (L x W x H)	1400 x 970 x 1200 mm
WEIGHT	460 kg (empty) 900 kg (filled with water and fuel)
FUEL CAPACITY	45 l
WATER TANK CAPACITY	400 l, additional tank as an option
HOSE REELS	80 m treatment hose

Eco Weedkiller Pro 20 Dual

The Eco Weedkiller Pro 20 Dual has two heaters with a combined output of 186 kW.

The devices have a 310-litre fixed tank (for water circulation), but it is recommended to use it connected to water supply system or with additional external water tanks.

A 'double flow' option is also available, where the output of both heaters can be directed to a single treatment hose. This saves time, especially in controlling invasive species where a lot of water is needed.



The Pro 20 Dual has two 80 meter treatment hoses.



With "double flow", a single user can treat large areas, keeping the unit cost low.



The starting point in the development of the device was to create a piece of equipment that anyone could operate after a short orientation period.

For professionals
Diesel powered



More information on
www.ecoweedkiller.com

USERS	2
POWER SUPPLY	Hatz diesel engine 2 x Diesel fuel heater 93 kW
OUTPUT	Weed control: 2 x 10 l/min (99-101°C) Pressure wash & disinfection: 150 bar, 15 l/min (70-75°C)
FUEL CONSUMPTION	11 l/h (1 user) 20 l/h (2 users)
DIMENSIONS (L x W x H)	1400 x 970 x 1200 mm
WEIGHT	610 kg (empty) 1000 kg (filled with water and fuel)
FUEL CAPACITY	90 l
WATER TANK CAPACITY	310 l, additional tank as an option
HOSE REELS	2 x 80 m treatment hose 20 m inlet hose

Eco Weedkiller Pro 30H

The multifunctional hot water unit PRO30H is the latest addition to the Eco Weedkiller family. The PRO30H unit, heats the water with two industrial grade heaters with a combined power of 256 kW. The efficiency of the heaters is extremely high, exceeding 95%, and they produce boiling water at a rate of 30–35 liters per minute.

The PRO30H connects to various machines for efficient weed control and more. It supports manual and machine-assisted application with accessories like sprayers and hoses (40–80 m). Beyond weed control, it handles pressure washing, de-icing, drain cleaning, and graffiti removal.

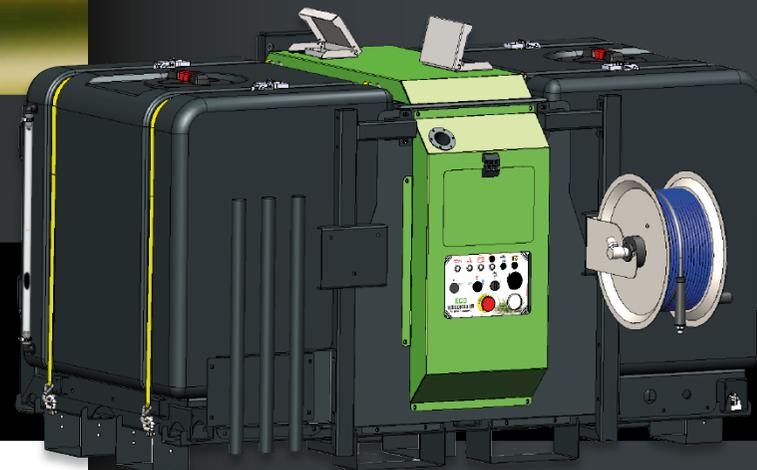


The PRO30H can handle even the largest treatment areas with high efficiency.



Both manual and machine-assisted application are available for the PRO30H making it a versatile workhorse for demanding applications.

For professionals
Diesel powered



More information on
www.ecoweedkiller.com

USERS	1
POWER SUPPLY	2 x Diesel fuel heater 128 kW
OUTPUT	30-35 l/min (boiling water) 43 l/min (water pump)
FUEL CONSUMPTION	??
DIMENSIONS (L x W x H)	1670 x 1280 x 1440 mm
WEIGHT	850 kg (empty) 1750 kg (filled)
FUEL CAPACITY	86 l
WATER TANK CAPACITY	800 l
HOSE REELS	40-80 m



In addition to weed control the PRO30H handles various other cleaning and de-icing tasks, which makes it perfect for general infrastructure maintenance.

ELECTRIC DEVICES

Our electric devices could be compared to an electric car. Their operating time and capabilities are more limited than the diesel-powered devices. The weed control performance is as good as with comparable diesel equipment, but the equipment cannot be used for hot water pressure washing.

Our electric devices do not have expensive batteries, but the energy is stored in water. This means that you can also take advantage of periods when electricity is cheap. Because the devices do not require expensive batteries, they are cheaper compared to other devices. The Pro SP Series and Garden are 100% electric!

You can fill the electric devices with any type of hot water (e.g., district heating plant waste water). This saves energy in heating water to 100 degrees. The device can also be connected directly to solar panels.

In the SP series, the water remains at 100°C for at least eight hours after the power is switched off. During operation, the device does not need to be connected to electricity or water supply system. You can go wherever you want.

Safety features include a thermostat and an industrial overpressure steam valve. They make it completely safe to use the devices.

Eco Weedkiller Pro 3SP

The Eco Weedkiller Pro SP series is the world's first and only fully electric hot water weedkiller for professional weed control. The devices are based on dose heating.

The Pro SP can be used for an unlimited number of short treatments, while still maintaining a constant outlet water temperature.

With the 300 litre water tank of the Pro 3SP, you can treat 100-150 m² of fully greened area. The Pro 6SP is equipped with a 600 litre water tank.

Pro SP devices are virtually silent when working, with only a hiss from the nozzle telling the operator that the water is hot enough for weed control.



SP series devices are 100 % electric!



Suitable for locations where noise is important.



During use, the appliance does not need to be connected to electricity or water supply system.

For professionals
Electric



More information on
www.ecoweedkiller.com

USERS	1
POWER	3 kW/10 kW
VOLTAGE	230 V/400 V - 50 Hz / 12 V
WATER FLOW	ca. 6 l/min (100°C)
AUTOMATIC HOSE REEL	20 m
MAX. OPERATING PRESSURE	3 bar
WATER TANK CAPACITY	300 l
WEIGHT	310 kg (empty) 610 kg (full)
DIMENSIONS (P x L x K)	1250 x 1000 x 1050 mm
IP-CLASSIFICATION	IP44

Eco Weedkiller Pro SP Mini

The Eco Weedkiller Pro SP mini is an all-electric weed control device based on dose-heating. With the 150 litre water tank of the Pro SP mini, you can treat 50-75 m2 of fully greened area.

All Pro SP devices are virtually silent when working, so it is perfectly suited for locations where noise is a concern.

Pro SP mini was designed according to the wishes of users and is an ideal option for many different applications.

Thanks to its compact size and light weight, the device is easy to move with, for example, an ATV or a riding mower.

For professionals
Electric



More information on
www.ecoweedkiller.com



The SP Mini fits easily into most vans which makes working convenient.



Get your SP Mini with an integrated compact trailer to increase mobility.



The SP mini is a great choice when mobility and space saving is preferred.

USERS	1
POWER	3 kW/10 kW
VOLTAGE	230 V/400 V - 50 Hz / 12 V
WATER FLOW	ca. 6 l/min (100°C)
AUTOMATIC HOSE REEL	20 m
MAX. OPERATING PRESSURE	3 bar
WATER TANK CAPACITY	150 l
WEIGHT	160 kg (empty) 310 kg (full)
DIMENSIONS (P x L x K)	1150 x 720 x 1100 mm
IP-CLASSIFICATION	IP44

Eco Weedkiller Pro SP Mini

Eco Weedkiller Garden is the world's first affordable weed control device with 100°C water, designed specifically for easy and safe household use.

Eco Weedkiller Garden heats up 25 liters of water at a time, which can handle about 8 to 10 square meters of a grassy area.

The device is made of high quality materials and its "heart", the water tank, is made of stainless steel. Apart from the tank, all other components are replaceable, so the actual impact on the environment is minimal over the life cycle. This device can and may be repaired.

The device can also be filled with clean rainwater and heated using your choice of environmentally friendly electricity, making it even more ecological to use.



Keep your garden looking like new effortlessly and affordably.



No more need for manual weeding or using pesticides .



The device is safe for households with children or pets.

For consumers
Electric



More information on
www.ecoweedkiller.com

Garden 2 kW

POWER	2 kW (10 A)
VOLTAGE	230 V
DIMENSIONS (L x W x H)	40 x 40 x 118 cm
WEIGHT	26 kg (empty) 51 kg (full)
WATER TANK CAPACITY	25 l
HOSE	3 m treatment hose

Garden 3 kW

POWER	3 kW (16 A)
VOLTAGE	230 V
DIMENSIONS (L x W x H)	40 x 40 x 118 cm
WEIGHT	26 kg (empty) 51 kg (full)
WATER TANK CAPACITY	25 l
HOSE	3 m treatment hose

HEATING & ENERGY REQUIREMENTS

The amount of energy required at different water starting temperatures.

Amount of water: 300 l

Target water temperature: 105°C

Starting temperature of the water (°C)	Heating time (h)		Amount of energy needed (kWh)
	(230 V, 16 A)	(400 V, 16 A)	
5	11,6	3,5	34,9
30	8,7	2,6	26,2
50	6,4	1,9	19,2
60	5,2	1,6	15,7
75	3,5	1,0	10,5
95	1,2	0,3	3,5

GET IN TOUCH

Sales/export

Kimmo Kärki

+358 50 4900 085

kimmo@ecoweedkiller.com

Service advice & spare parts

Janne Hakkarainen

+358 50 5710 889

janne@ecoweedkiller.com

Locations

Iisalmi

Venakontie 4, 74130 Iisalmi, Finland

Tuusula

Pihasaunionkuja 6, 04300 Tuusula, Finland

 www.ecoweedkiller.com

 www.facebook.com/EcoWeedKiller/

 www.linkedin.com/company/eco-weedkiller/

 Eco WeedKiller

 ecoweedkiller