

IDROGRENA

HAILSTORM
FROST



USING IDROGRENA AFTER HAILSTORM

Idrogrena is a vector substance compatible with the majority of available disinfection products recommended after hail damage and does not pose phytotoxicity. In any case, a test of miscibility, particularly if disinfectant mixtures are to be applied is recommended before application

Idrogrena stimulates the plant and allows for a swift recovery of tissue lesions. Breaches in the vascular strands are sealed up more effectively and the formation and growth of new leaves is promoted. Copper based products added into Idrogrena aid the cicatrization of broken tissues and the combination with Idrogrena attenuates the side effects of the copper on the plant.

THE RECOMMENDED DOSES ARE

Application	Product or preparation	Doses per hectar*
First treatment	Idrogrena	5 l/ha
Second treatment 4-5 days later	Idrogrena	5 l/ha

The addition of 4 kg/ha magnesium nitrate is beneficial, it acts as a support for chlorophyll pigment production that eases the stress caused by hail damage.



USING IDROGRENA AGAINST FROST

As a **general biostimulant** Idrogrena supports a number of key functions in the plant. One major effect is the stimulation of nutrient uptake which works both for elements contained in the natural Idrogrena formula as well as those added to a nourishment mixture applied together with Idrogrena.

In the prevention and attenuation of frost damage, urea is a potent agronomical tool. Urea **lowers the freezing point** of liquids and thus reduces the formation of small ice crystals piercing the plant tissues (puncturing and destroying cells).

Plant inherent mechanisms, benefiting from Idrogrena biostimulation are working the same way: production and release of osmolytes such as dehydrin or carbohydrates lower the freezing temperature of plant fluids.

The Idrogrena effect, together with urea can lower the freezing point by 3-4 °C. Thus, in combination with established frost protection systems such as external heating during crucial periods or white/hoar frost control sprinkling, Idrogrena promotes frost endurance of the culture and can prevent severe damage to the crop.

We recommend the use of Idrogrena or urea manually mixed into an Idrogrena dilution for the preparation of a plantation against frost and maintenance during such an event. Precautionary treatments conducted a few days prior to frost are more effective, but the method also proves useful during the spell of cold temperatures or even the morning after the event. The best results are obtained keeping up the treatment until the end of the frost period.

Idrogrena stimulates the plant to resume its physiological activity and the addition of urea allows for increased resistance in case of ongoing frost.

THE RECOMMENDED DOSES ARE

Application	Product or preparation	Doses per hectar*
Anti-frost sprinkling (foliar)	Idrogrena plus	6-8 l/ha (0.3-0.5% solution)
	Idrogrena + urea (manually prepared mix)	4-5 l/ha + 4-5 kg urea/ha (0.3-0.5% solution)
Fertigation (radical)	Idrogrena plus	8-10 l/ha (1-3% solution)
	Idrogrena + urea (manually prepared mix)	5-6 l/ha + 5-6 kg urea/ha (1-3% solution)

*guidelines only, for the correct use of our products, please consult a specialist. Not to be applied to edible parts of the crop.



IDROGRENA

Fluid organic **BIOSTIMULANT**. Polyamines fluid extract

PERMITTED IN ORGANIC FARMING

Idrogrena is a fluid organic biostimulant **with polyamines (2-PHE and Spermine)**. The effectiveness of the product is given by the rapid availability of organic compounds which can be immediately absorbed by the plant as well as by the useful microorganisms at root level. Idrogrena is therefore considered ideal for use in foliar and irrigation applications (e.g. drip irrigation).

Density: watery fluid, cloudy (Specific weight 1.032 kg/l)

Packaging available: 5 lt - 25 lt - 200 lt - 1000 lt

