

# Methodology of hop protection – 2020 crop

obligatory for all Top Hop suppliers

Trade Name (active substance)	Concentration (dose per 1 ha)	Protective Period	Date of Application
<b>DOWNY MILDEW OF HOPS (Pseudoperonospora humuli)</b>			
<b>Aliette 80 WP</b> (fosetyl-Al)	0,3 %	14 days	At infection before introduction or after introduction of hop.
<b>Ortiva</b> (azoxystrobin)	0,75 – 1,6 l	14 days	The second half of June till the first half of July.
<b>Bellis</b> (pyraclostrobin + boscalid)	0,9 -2,0 kgs (as per growing period)	28 days	June – the first half of July.
<b>Revus</b> (mandipropamid)	1,6 l	14 days	After indtroduction till end of July.
<b>Orvego</b> (dimethomorf+ametoktradin)	2,7 l	10 days	The beginning of July till the beginning of August.
<b>Kuprikol 250 SC</b> (oxychloride-copper)	10 l	7 days	The second half of July till the beginning of August.
<b>Flowbrix</b> (oxychloride copper)	3,5 – 6,6 kg	14 days	The second half of July till the beginning of August.
<b>Curzate K</b> (cymoxanil + oxychlorid Cu)	5 kg	7 days	After indtroduction till end of June.
<b>Cuprocaffaro micro</b> (oxychloride copper)	0,35 %	7 days	The second half of July till the beginning of August.
<b>Cuproxat SC</b> (alkaline copper sulfate)	4 – 10 l	14 days	In August.
<b>Funguran progress</b> (hydroxide copper)	2,4 – 5,4 l	7 days	The second half of July till the beginning of August.
<b>Badge WG</b> (hydroxide + oxychloride copper)	7,14 kg	14 days	The second half of July till the beginning of August.
<b>Airone SC</b> (hydroxide + oxychloride copper)	7,35 l	14 days	The second half of July till the beginning of August.
<b>Coprantol Duo</b> (hydroxide + oxychloride copper)	7,14 kg	14 days	The second half of July till the beginning of August.
<b>Defender</b> (hydroxide copper)	2,4 – 5,4 l	14 days	Till the formation of cones.
<b>Defender Dry</b> (hydroxide copper)	2,4 – 5,4 kg	7 days	Till the formation of cones.
<b>Cobran</b> (hydroxide copper)	2,4 – 5,4 kg	7 days	Till the formation of cones.
<b>Folpan 80 WG</b> (folpet)	1,87-4,68 kg	21 days	Till the formation of cones.
<b>Folpan Gold</b> (metalaxyl-M + folpet)	0,2 kg / 100 l	14 days	Till the formation of cones.
<b>POWDERY MILDEW (Sphaerotheca humuli)</b>			
<b>Bellis</b> (pyraclostrobin + boscalid)	0,9 – 2,0 kgs (as per growing period)	28 days	At detection of disease till the end of July.
<b>Kumulus WG</b> (sulphur)	10 – 12,5 kgs	7 days	After introduction till formation of cones.
<b>Kumar</b> (Potassium bicarbonate)	2,2 – 5 kg	1 day	After introduction till the harvest.
<b>APHIDES (Phorodon humuli)</b>			
<b>Movento 100 SC</b> (spirotetramat)	1,5 l	21 days	From the second half of June till the finishing of the flowering.

<b>Teppeki</b> (flonicamid)	0,18 kg	21 days	In June till first half of July, according to warning.
<b>Sivanto prime</b> (flupyradifurone)	0,75 l	21 days	According to warning.
<b>RED SPIDER MITE (<i>Tetranychus urticae</i>)</b>			
<b>Nissorun 10 WP</b> (hexythiazox)	1,5 kg	28 days	In May till first half of June.
<b>Kanemite 15 S</b> (acequinocyl)	0,15 %	21 days	In June and July.
<b>Acramite 480 SC</b> (bifenazate)	1,5 l	14 days	Till the end of July.
<b>Vertimec 1,8 EC</b> <b>Vertimec 1,8 SC</b> (abamectin)	0,04 % 0,85 l - 1,25 l	28 days	Till July 20 <sup>th</sup> .
<b>Milbeknock</b> (milbemectin)	1,5 l	21 days	From flowering till formation of cones.
<b>ALFALFA SNOUT BEETLE (<i>Otiorrhynchus ligustici</i>)</b>			
<b>Actara 25 WG</b> (thiamethoxam)	0,2 kg	--	At the time of insect mass get up.
<b>ROSY RUSTIC MOTH (<i>Hydraecia micacea</i>)</b>			
<b>Actara 25 WG</b> (thiamethoxam)	0,2 kg	--	In April till the first half of May.
<b>FLEA BEETLE (<i>Psylliodes attenuata</i>)</b>			
<b>Actara 25 WG</b> (thiamethoxam)	0,2 kg	--	5-10% damage of leaf
<b>BUGS (<i>Miridae</i>)</b>			
<b>Karate Zeon techn. 5 CS</b> (lambda-cyhalothrin)	0,125 l	14 days	At the appearance of hop's damage, before the flowering at the latest.
<b>LEAF CURLING</b>			
<b>Zinc sulphate</b> ZnSO <sub>4</sub> · 7 H <sub>2</sub> O	0,15 % (1,5 kg - 3,0 kg)	--	After the hop training. According to the symptoms additional 1-2 sprays.
<b>Zinkosol forte</b> (produced from ZnSO <sub>4</sub> )	0,3 % (3,0 l - 4,5 l)	--	
<b>WEEDS CLEARANCE AFTER HARVEST</b>			
<b>Fusilade Forte 150 EC</b> (fluazifop P-butyl)	2,5 l - 3,0 l (couch grass) 1,0 l - 1,5 l (annual grass)	--	After the harvest till September 15 <sup>th</sup> .

**Notices:**

- 1) Usage of growth stimulators is prohibited.
- 2) **Herbicides based on MCPA are strictly prohibited!**
- 3) Other substances which are not mentioned in this list must not be used!
- 4) It is prohibited to use generics despite the active substances are identical with substances mentioned in this Methodology.
- 5) During the chemical protection of plants hereabout hop gardens hops must not be affected in any case by applied chemicals (e.g. wind transmission)!

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