



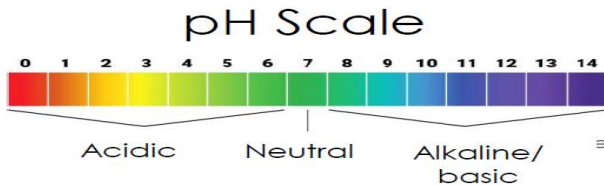
pH

Three parameters to measure before preparing the spray solution

- The pH is a measure of the acidity or basicity of a solution.
- A slight change in pH represents a significant change in acidity. For example : *a pH of 5 is 10 times more acidic than a pH of 6 and 100 times more acidic than a pH of 7.*
- In the case of pesticides, pH affects their stability, absorption and solubility.
- The majority of active ingredients perform well at a pH between 5 and 6. However, this is not an absolute rule, check the recommended pH for each pesticide.
- As a matter of fact, when the water's pH is higher than the recommended level, a correction must be made.
- The half-life of a pesticide refers to the time required for the product to lose 50% of its effectiveness (hydrolysis).

Examples :

- Active ingredient : Captan
- Stability :
pH5 = 32 hours, pH7 = 8 hours, pH8 = 10 minutes, pH9 = 2 minutes



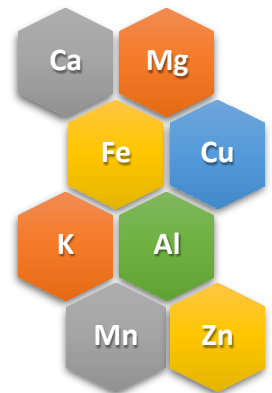
- It is advisable to use the spray solution no later than a few hours after preparation. The longer the pesticide is in solution, the less effective it is.

Hardness and metals

Water hardness CaCO ₃ equivalent (ppm)	Classification
0 – 115	Soft
115 – 343	Moderately hard
343 – 800	Hard
800 +	Extremely hard

Source : World Health Organization

- Hardness is a measure of Ca and Mg cations expressed in ppm or mg/L of CaCO₃.
- Cations in water can interfere with pesticides and reduce their effectiveness.
- They are also the cause of deposits in the equipment and the nozzles.
- In order to correct the water quality, we take into consideration these cations : Ca, Mg, K, Fe and Na.
- A hardness correction should be made from a threshold of 115 ppm.
- The correction is made by adding a conditioner.



Turbidity



- Turbidity is the measure of the relative clarity of a liquid. Material that causes water to be turbid includes clay, silt, organic matters ...
- These solids can interfere with pesticides and reduce their effectiveness.
- It is important that we use clean water when applying pesticides.
- A filtration or decantation step should be done if the water is not clear.

WATER ANALYSIS



CONDITIONERS



pH

- Li 700 is an acidifier, a non-ionic surfactant, a penetrating agent, a deposition aid and an anti-drift aid.
- The rate of application of this product depends on the intended use (see the technical data sheet).
- In this case, it is its acidifying action that interests us : Li 700 corrects the pH of the water to limit the risk of alkaline hydrolysis of pesticides.

OLIGO-AMMO

Hardness

- OLIGO-AMMO corrects the hardness of water.
- It also has a nutritional effect for the plant due to its composition (8-0-0 + 9% S)
- It is a liquid product, therefore easier to use and more soluble than granular ammonium sulphate.



Dureté

- CHOICE Weather Master sequesters and chelates cations present in hard water.
- It is a liquid and non-corrosive product, which can be used in most mixtures.
- Due to its liquid form, it is more soluble and easier to use than granular ammonium sulphate.

IMPORTANT

The dosage of the above products depends on the analysis results and the water quality.

Always read the label before use.