



European and Mediterranean Plant Protection Organization
 Organisation Européenne et Méditerranéenne pour la Protection des Plantes

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Dose Expression for Plant Protection Products in high growing crops

Glossary of Terms

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Terms	Definitions
Crop related terms	
High growing crops	<p>Term for crops such as pome fruit & stone fruit (“top fruit”), small fruit (except for strawberry; e.g. raspberry, blackberry, currants.), grapevine, hop, citrus fruit, nut fruit, olives, but also some vegetables (i.e. tomato, pepper, aubergine, cucumber) and ornamentals (e.g. roses, alley trees) grown vertically in open field or in green houses.</p> <p>The foliar PPP applications (other than herbicides) in high growing crops are normally not sprayed towards the ground as is the case for other field crops, but sidewise and/or upwards.</p>
Wall forming crops or Wall crops	<p>Terms for high growing crops with a linear ground projected area without significant gaps along the row.</p> <p>E.g. super intensive crops of olives, apple, pear, grapevine.</p>
Globular crops	<p>Terms for high growing crops with elliptical or round ground projected area, with or without gaps in the row between the single plants resp. canopies.</p> <p>E.g. citrus, olives, stone fruits, nut fruits, persimmon, pomegranate.</p>
Foliage height (FH) Unit: m	Distance from the lowest leaves / fruits to the plant top, excluding the stem area.
Canopy Height (particularly used for trees) (CH) Unit: m 'Crown Height' may be used as a synonym	Distance from the lowest leaves / fruits to the tree top, excluding the trunk area.
Crop Height Unit: m	Total height of the aerial part of the plant

Terms	Definitions
Canopy or Foliage shape	Term to differentiate between spindle trees, globular tree shape, plants in goblet pruning system, tendone, pergola, etc.
Width at the middle of the foliage height (= mid width of the crown) Unit: m	Average maximum distance between outer leaves of the foliage at the middle of the foliage height/canopy height.
Globular diameter Unit: m	Globular crops: Average distance between outer leaves of the tree/plant at the middle of the foliage height/canopy height (minimum + maximum width/ 2).
Ground area Unit: ha or m ²	Ground surface area of the site/plot.
Rows per plot	Number of (treated) rows per plot. Double or multiple rows are considered as one, as long as they are in-between only two spray bands.
Row length per plot Unit: m	Sum of length of all rows of a plot. In case of double or multiple rows: also double/multiple rows are considered as a single row.
Row sides applied	Number of row sides applied. Usually two sides a row are applied, but in specific cases e.g. only one side per row may be applied.
Spacing between rows or Row spacing Unit: m	In case of single rows: Distance from the centre of one row to the next row. In case of double or multiple rows: Distance from the middle of one double/multiple row to the middle of the next double/multiple row, only treated from the outer side.
Spacing within row Unit: m	Distance from tree/plant to the next tree/plant within a row.
Leaf Wall Area (LWA) Unit: m ² /ha	The Leaf Wall Area is the area of the foliage or canopy surface per ha ground area. It is calculated using canopy or foliage height, and spacing between rows: LWA (m²/ha ground area) = canopy or foliage height x row sides applied x (10.000 m²/spacing between rows m).
Tree Row Volume (TRV) Unit: m ³ /ha	The Tree Row Volume is the cubic volume of the rows. It is calculated using canopy or foliage height, mid-width of the crown, and spacing between rows: TRV (m³/ha ground area) = (canopy or foliage height) x (mid-width of the crown) x (10.000 m²/spacing between rows).

Terms	Definitions
Application related terms	
<p>Treated Canopy height ‘Spray band height’ may be used as a synonym Unit: m</p>	<p>The height of the sprayed band, usually indicating the height of the treated leaf wall/crop.</p>
<p>treated Leaf Wall Area (tLWA) Unit: m²/ha or m²/</p>	<p>The treated Leaf Wall Area is the area of the leaf wall actually treated with the plant protection product.</p> <p>tLWA (m²/ha ground area) = row sides applied x spray band height x (10.000 m²/ spacing between rows).</p> <p>tLWA (m²) = row sides applied x Spray band height x row length.</p> <p>The tLWA may also be smaller than the actual LWA, if calculated from a spray band height lower than the actual foliage/canopy//crop height; e.g. bunch applications on grapevine.</p>
<p>Treated Tree Row Volume (tTRV) Unit: m³/ha</p>	<p>The treated Tree Row Volume is the volume of the canopy/crop actually treated with the plant protection product.</p> <p>tTRV (m³/ per ha ground area) = (spray band height) x (mid-width of the crown) x (10.000 m²/spacing between rows).</p>
<p>Dose adjustment</p>	<p>Adjustment of the doses to a specific situation (e.g. growth stage, width, pest pressure)</p>