# Sustainable fertiliser use in field-grown ornamental crops

## Optimising for plants and the environment

Use this poster to determine which type of lime, organic matter and fertiliser to use. Your soil analysis indicates how much product you need. It is recommended to also consider fertilisers with other nutrients, such as micronutrients, for complete fertiliser provision.

### - LIMING -

Allow a few weeks between liming and fertiliser application.
Also note the ratio of calcium to magnesium.

	Example trade names	% Mg0	Abc/ nv*			
DRY POWDERED LIME better distribution, but more dust creation	Dolokal, Emkal, calcified seaweed	0-5	50-54			
	dolomitic lime, Duwa dolomite	19	60			
HYDRATED LIME POWDER less dust creation, but poorer distribution	Agrocarb®, Limkal, Witkal	0	47-50			
	Borgakal	7	53			
	Duwa Mag	18	57			
GRANULAR LIME easy to spread, but more expensive	algal lime, calcified seaweed	0-5	45-50			
	DCM Green-Lime®, Dolokorn, Duwagran, dolomitic lime, pHigh	15-20	53-55			

<sup>\*</sup>Acid-binding capacity or neutralising value: the higher the value, the greater the effect on the soil pH.

- ORGANIC MATTER - Also note the amount of nutrients that you apply.						
	Example trade names	Organic matter	Effective organic matter <sup>(1)</sup>	Nutrients <sup>(2)</sup>		
FARMYARD MANURE cheap		16-19%	5-15%	1-1.7%		
GREEN COMPOST <sup>(3)</sup> lots of effective organic matter	Vlaco	20%	19%	1%		
ORGANIC SOIL IMPROVER concentrated form of (effective) organic matter	DCM Copron, DCM Vivisol®, HumeO, Karisol®, Plantafert	10-80%	5-65%	0-10%		
GREEN MANURE choose between grass and leaf based		2200- 4000 kg/ha	625-1100 kg/ha	50-75 kg/ha		

Percentages based on fresh weight. (1) Stable organic matter that contributes to the organic matter content in the soil. (2) Only the N and P.O. amounts are taken into account. (3) Average composition of Vlaco green compost is provided. The composition of other compost types can vary.

## - NITROGEN AND PHOSPHORUS FERTILISER USE -

Use the right fertiliser at the right time.

#### - SLOW-RELEASE -

Slow-release fertilisers are useful at the start of the growing season and for **top dressing application** to ensure sufficient duration.

Choose a **release response** that matches the crop's period of growth.

Take the amount of nitrogen that is released in the autumn into account, to avoid having too much nitrate residue.

	SOLID	Dologoo
FORM OF NITROGEN	SOIL application	Release period*
MINERAL		
CRF COATING release due to heat and moisture	Agrocote®, Basacote®, CoteN™, Multicote™, Plantacote®, Osmocote® (Preplant)	2-18 m
PARTIALLY COATED also starter effect	Agromaster®, Duratec® Top 14, Multigro®, MyCoteN™ Mix	2-9 m
LOW SOLUBILITY AND SLOW-RELEASE N-FORM release due to heat and moisture	Floranid <sup>®Twin</sup>	3-4 m
STABILISED relatively quick-release	calcium cyanamide, NovaTec®	6-10 w
MICROBIAL DECOMPOSITION release is temperature dependent	Smartfert TOP, Triabon®	3-6 m
ORGANIC-MINERAL also starter effect	DCM Mix 5, DCM NK-Mix, DCM Vivifos®, DCM Xtra-Mix® 1, Marathon, Phoenix, Orgamé-Plus, OrgaSuper, OrgaTop	2-3 m
ORGANIC speed of release very product dependent	bone meal, BioGro, BioSol, blood meal, DCM Eco-Mix, DCM Eco-Xtra® 1, Orga-Bio	2-5 m

#### - QUICK-RELEASE -

The quick-release fertilisers are used mainly for top dressing application and are ideal for split applications. You may want to add a small dose at the start of the growing season.

Choose the right form of nitrogen, taking the weather conditions into account.

	SOLID SOLUBLE/LIQUID			
FORM OF NITROGEN	SOIL application		FOLIAGE application	
NITRATE easily taken up, leaches quickly, do not use when heavy rainfall is forecast	Haifa Cal Ag, Multi-K Mg, Unika <sup>TM</sup> , YaraLiva® TROPICOTE	Calanit, Haifa Cal®, Haifa-Mag, Krista, Maganit, Potanit, Universol®, YaraLiva® CALCINIT	Agroleaf Power High N, Calitech, Haifa Cal <sup>™</sup> , Haifa-Mag, Magnitech, Polyamix	
AMMONIUM/UREA recommended early in the growing season	Krista MAP, Polyamix, Seed sprint H5, YaraVera®	DCM Prolico® Flower, Haifa MAP, Hakaphos®, Monafos, Nova MAP, Novatec® Solub 21, Ureafos	Agroleaf® Power, Basfoliar®, DCM Olega® Complex, Final K, Folur S, Polyamix, Silacon, YaraVera®	
AMMONIUM NITRATE choose a ratio of ammonium to nitrate that is appropriate for the weather conditions	Blaukorn®, Easy Start®, Polyamix, YaraBela®, YaraMila™	Amnitra <sup>™</sup> (substrafeed), Nutricomplex, Polyamix, Polyfeed, Soluplant, Universol®	Agroleaf® Power, Hakaphos®, Polyamix, Polyfeed Duetto, Soluplant Universal, Vitanica®	
ORGANIC N for a slightly longer effect		DCM Prolico® Flower	Delfan, Protifert, Ruter AA, Vitanica®	
PK (no N) for the start of the growing season	Turbo Seed Zn, triple super- phosphate	Haifa MKP, Nova PeaK	Kalafos, Phostrade, Triafos	

The classification and choice of trade names on this poster is based on the nitrogen content and also to a lesser extent the phosphorus content. The list of products was drawn up in December 2018. This serves only as an example and is not intended to be complete. Product names and compositions are subject to change. More information is available from your



This poster is a supplement to the guide 'Sustainable fertiliser use in field-grown ornamental crops'. Consult this guide before choosing your fertilisers. Also check current legislation about the use of fertilisers at www.vlm.be.

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<sup>\*</sup>This indicates the range of release periods for fertilisers in this category.