

# Humates

Bio stimulant

All natural carbon based soil food.

Why use *Humates*?

Features	Benefits
Concentrated, high quality extracts of Humic Acid sourced from ancient leonardite deposits	Natural microbial stimulant, especially fungi
Known for its benefits as a soil conditioner and nutrient stabiliser	Repeated application results in improved soil structure as well as increased moisture and nutrient retention
Available in a 70% granule, ideal for use with granular fertilisers, as well as a 12% liquid formulation for liquid application	Reduced leaching and lock up of applied nutrients such as Nitrogen and Phosphorus
Essential additive for improving sustainability of fertiliser applications i.e. Urea, DAP and MAP	Buffering against the negative effects of fertiliser applications, toxic soil conditions and extreme pH situations

## Application instructions:

Use regularly in conjunction with fertiliser applications to improve sustainability and long term soil health. There are several different humate formulations. Humate Liquid is for liquid applications and blends. Humate Granules (round) are ideal for dry applications and for inclusion in granular fertiliser blends. Humate Crystals are used for dry applications and can also be diluted with water.

Soil Application	Granule or Crystal	As a general rule apply at a rate equivalent to 5% of the fertiliser blend. i.e. 5 kg Humate Granules per 100 kg fertiliser. Do not exceed 10 kg per ha when banded or 20 kg per ha broadcast
Soil Application	Liquid	10 L per ha. For stabilisation of Urea 1 - 1.5 L per 15 - 20 kg Urea
Soil Application	DIY Liquid Humate / Crystal	Mix 1 kg Humate Crystals per 5 L water. Allow to dissolve, the crystals are highly soluble but heat and agitation will improve this process. Filter resulting liquid to remove any insoluble product. 10-15% is insoluble. Apply as per liquid recommendation above.

Madumbi Humate Liquid contains humic acid. Reg. No. B4946, Act No. 36 of 1947. Madumbi Humate Crystal contains humic acid. Reg. No. B4797, Act No. 36 of 1947. Registration holder: Madumbi Sustainable Agriculture (Pty) Ltd, Postnet Suite 20, Private Bag X6011, Hilton, 3245. Reg. No. 2009/020798/07.

