

## WHAT IS MANNA 10:5:7?

Manna 10:5:7 is a highly effective, organic-based sportsturf liquid biostimulant. It is formulated to provide essential nutrients, enhance turf resilience, and improve soil health. The product integrates cutting-edge Genesis C4L technology and a consortium of beneficial *Bacillus* strains, optimized to support vigorous plant growth.

**COLOUR & APPEARANCE:**  
Dark brown, homogeneous liquid

## APPLICATION RATE AND INSTRUCTIONS

**General rate: 10 - 20ℓ per Ha**

**Application timing:** Apply Manna bi-weekly or monthly to optimize nutrient uptake and stress resilience.

**Method:** Suitable for both foliar application and soil drenching.

**Frequency:** Bi-weekly, monthly, or as needed based on turf requirements and environmental conditions.

## INGREDIENT COMPOSITION:

- Protein hydrolysate
- Natural NPK (Nitrogen, Phosphorus, Potassium)
- Full Natural Micro and Trace Elements
- Amino Acids
- Seaweed Extracts
- Humic and Fulvic Acids
- *Bacillus amyloliquefaciens*, *Bacillus laterosporus*, a sub species of *B. laterosporus*, *Bacillus licheniformis*, a sub species of *B. licheniformis*
- **Genesis C4L Technology:** A proprietary blend of flavonoids and plant extracts

## CHEMICAL ANALYSIS:

<b>N</b>	9,7%	<b>Mn</b>	6,3%	<b>Hg</b>	<1,25 mg/kg
<b>Fulvic Acid</b>	6,3%	<b>Cu</b>	13,3%	<b>Pb</b>	6,56 mg/kg
<b>Humate</b>	13,3%	<b>Zn</b>	3%	<b>Se</b>	1,83 mg/kg
<b>Ca</b>	3%	<b>B</b>	3,4%	<b>pH</b>	7.5
<b>Mg</b>	3,4%	<b>Mo</b>	7,31%	<b>Calculated Carbon</b>	25,39%
<b>K</b>	7,31%	<b>Al</b>	4943,79 mg/kg	<b>C:N</b>	3.9:1
<b>Na</b>	477,1 mg/kg	<b>Ni</b>	165,81 mg/kg	<b>Moisture</b>	60°C: 31,31%
<b>S</b>	0,15%	<b>Cd</b>	1,85 mg/kg	<b>Ash</b>	56,34%
<b>P</b>	4,6%	<b>Cr</b>	368,31 mg/kg		
<b>Fe</b>	9,7%	<b>As</b>	<6,15 mg/kg		

## BENEFITS OF MANNA APPLICATION

- Enhances nutrient uptake and efficiency
- Improves stress tolerance against abiotic and biotic factors
- Promotes robust root development and plant growth
- Increases yield and improves crop quality
- Improves photosynthesis and up and down gene regulation
- Enhances soil structure and microbial activity
- Reduces dependency on chemical inputs

## MODE OF ACTION

Manna 10:5:7 works through several mechanisms:

- **Nutrient Supply:** Directly provides essential macro and micronutrients.
- **Root Stimulation:** Amino acids and seaweed extracts enhance root growth and function.
- **Soil Health:** Humic and fulvic acids improve soil structure and nutrient availability.
- **Stress Resilience:** Genesis C4L technology induces systemic acquired resistance in plants, enhancing tolerance to stress and improves photosynthesis.
- **Microbial Enhancement:** *Bacillus* strains promote a healthy soil microbiome, aiding in nutrient cycling and disease suppression.

## COMPATIBILITY

Manna 10:5:7 is compatible with most common sports turf amenity inputs. However, it is advisable to conduct a jar test or consult with a technical advisor when mixing with other chemical agents for the first time. Avoid mixing with highly acidic or alkaline products without prior testing.

**VOLUME:**

**20L to 1000L**



H319 - Causes serious eye irritation.

### PRECAUTIONARY STATEMENTS:

P102 - Keep out of reach of children.

P264 - Wash hands thoroughly after handling.

P280 - Wear eye protection.

P305+P351+P338 -

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention.