

INTRODUCTION

Miklens Bio Pvt. Ltd. started its journey in August 2016 with a goal to lessen the chemical usage and help farmers to channelize their farming efforts with our bio-agri inputs for higher productivity with quality produce. Our technology portrays the idea of "Farming with naturally occurring microbes" which helps in increasing the soil fertility and organic production leading to better profitability. The core strength of our company lies in research and development, and we call our proprietary technology platform as Agri Microbial Technology (AMT). We provide agri solutions for both crop nutrition and plant protection. Our huge product basket comprises of Bio-fertilizers, Bio-pesticides, Microbial NPK, AMT Insecticides and AMT Fungicides.

All our products are 100% organic and certified by worldwide certifying agency, Control Union as per the APEDA guidelines under NPOP.

PLANT GROWTH ENHANCERS

MIKNATURALS



- MikNaturals helps in creating a conducive environment in enriching the soil microbe flora thereby increasing the uptake of required nutrient.
- MikNaturals contains elements in bio-available form, hence negligible wastage of fertilizer by leaching, volatilization with no fixation – better FUE and better productivity
- MikNaturals is free from toxic salts and heavy metals; thus, it is safe for the environment, soil health – benefits the soil when used over a period of time
- MikNaturals imparts strength to the plants to withstand stress caused by climatic vagaries, stress from infestations of diseases and pests
- MikNaturals helps in initial crop vigour, provides early boost and recommended for all stages of the crop, vegetative, flowering, fruit setting, fruit maturity etc.
- Dosage: Liquid: 3-5 ml/litre, Powder: 3-5 gms/litre

MIKCON

- Mikcon delivers essential elements to crops for general maintenance of nutrient levels, encourages vigorous root establishment, and promotes balanced healthy vegetative growth with abundant flower formation.
- The product contains the required amino acids with micro and macro elements in essential quantities which facilitates better absorption and assimilation of nutrients increases the yield and overall quality of crops
- Contains microbial by products rich in phytohormones, PGA, proteins, carbohydrates, auxins, vitamins and other growth regulators in optimum level
- The product is also blended with several phytoelicitors that give protection against pests & diseases by imparting System Acquired Resistance (SAR)
- Dosage: 1-1.5ml/ltr (Researched and formulated the product as "Mikcon Super" for North India market as per geographical condition)



MIKBOOST



- MikBoost is a phenomenal product that contains several essential hormones, enzymes and amino acids besides florigens that trigger excellent flowering.
- MikBoost contains several trace elements, nutrients, hormones and other florigens help flower retention and arrest flower drop.
- MikBoost helps in controlling fruit drop and thereby increasing the productivity; the unique feature of photosynthate translocaters coupled with hydrolyzed proteins ensure good fruit formation and proper seed filling which ultimately results in extra yield and quality produce.
- The antioxidants and natural occurring hormones will improve the quality of the produce like increasing the keeping quality and freshness of the agri produce like flowers and fruits
- Use 1st spray of MikBoost at the time of flower initiation and 2nd spray during fruit formation stage.
- Dosage: 1 ml/ltr (Researched and formulated the product as "Mikstim" for North India market as per geographical condition)

MIKMOR

- Mikmor delivers essential elements to crops for general maintenance of nutrient levels and encourages vigorous root establishment
- Mikmor contains large amount of amino acids proteins supplemented with humic acids, fulvic acid, PGA, auxins and antifungal/insecticidal property
- The product contains the required amino acids in essential quantities which increases the yield and overall quality of crops.
- The specific amount of amino acid in the product enhance the microflora in the soil, when applied in drip irrigation facilitating better absorption and assimilation of nutrients.
- It contains microbial by products rich in phytohormones, vitamins and other growth regulators in optimum level.
- Product contains microbial NPK in the range of 2-4% which also add up to the plant for better productivity
- Dosage: Short duration – 5kg/acre, Perennial - 8kg/acre



MIKHUME



- Mikhume is formulated with high grade humic acid that promote plant health and growth. Humic acid is vital to promote hormonal activity in plants. Plant hormones are chemical communicators, which helps to regulate plant's development in response to its surrounding environment.
- Mikhume contains humic acid, fulvic acid, macro micro nutrients and proprietary constituents essential for plant growth.
- In high pH soils, where nutrient availability is a problem, Mikhume greatly increases the availability of phosphorous, iron, zinc and manganese.
- An effective soil enhancer and a plant growth bio-stimulant.
- A chelating agent and a disease suppressant.
- High in both humic and fulvic acids, auxins, minerals, vitamins, etc.
- Increases microbial and mycorrhizal activity.
- Promotes nutrient uptake.
- Accelerate seed germination, aids root formation and Increase crop yields.
- Helps in reducing frost damage
- Dosage: 2-3ml/ltr

MIKPOWER



- Mikpower, a proprietary research product from Miklens Bio Pvt. Ltd., is an excellent plant tonic, derived through fermentation process.
- MikPower contains several trace elements, nutrients, phytohormones that imparts good vegetative growth and increases productivity
- In case of multi harvested crops, spray has to be collaborated with the harvest practice
- Dosage: 1ml/ltr (Researched and formulated the product as "Teeka" for North India market as per geographical condition)

MIKRRHIZA

- Mikrrhiza is formulated with high grade Mycorrhiza that promotes plant health and root growth.
- Mikrrhiza contains Mycorrhiza, Fulvic acid, Macro & Micro Nutrients and proprietary constituents essential for plant growth.
- Mikrrhiza greatly increases the microbial and micorrhizal activities & promotes nutrient uptake.
- Benefits - Mikrrhiza - helps in:
 - Rapid and extensive root growth
 - Uptake of phosphorous and other nutrients
 - FUE
 - Stress management
- Dosage: 2 kg/acre (Researched and formulated the product as "Jeeva" for North India market as per geographical condition)



PLANT PROTECTION : BIO-FUNGICIDES

MIKDEW



- Mikdew is a microbial based fungicide effective against oomycetes group of fungi like Pythium, Phytophthora, Plasmapara etc. that causes deadly diseases like late blight and downy mildew. Mikdew is equally effective against soil borne pathogens like Fusarium, Rhizoctonia, Sclerotium etc that causes wilt disease.
- Mikdew is a fungicide that contain systemic compounds and helps in translocation both basipetally (downward) and acropetally whether applied to roots or leaves.
- Mikdew performs well on all crops under different agro-climatic conditions.
- Mikdew has shown its monopoly over the downy mildew management in grape segment.
- Dosage: Liquid - 0.5ml/ltr (Researched and formulated the product as "Viraam" for North India market as per geographical condition)

RAPID X

- Rapid-X is a broad spectrum microbial fungicide with protective action and is supplied as water soluble powder which are mixed with water.
- Rapid-X is recommended on a number of crops world-wide to control fungal diseases, such as Anthracnose, Alternaria, Pythium blight, leaf spot, downy mildew, Botrytis, rust and scab.
- Rapid-X acts by disrupting lipid metabolism
- Rapid-X works with both prophylactic and curative properties and gives longer protection from the target pathogens
- Dosage: Powder :2-3gm/ltr



MIKROOT



- Mikroot is a novel blend of microbial and plant extract. It is an organic comprehensive solution to all the soil pests like white grubs, termites, wireworms and nematodes.
- Mikroot works quite effectively against all these pests through its unique mode of action through ingestion and also as contact properties.
- On ingestion, Mikroot enters the gut and damage the epithelial layers of the digestive system thereby resulting into septicemia leading to death of the pest. It also inhibits the chitin synthesis.
- Dosage: 5 gm/ltr

UPAHAAR pH Regulator



- Upahaar pH Regulator strongly influences solubility and availability of plant nutrients.
- Contains large amount of amino acid, crude protein, poly glutamic acid and unique microbial extracts.
- It delivers essential elements to crops, maintains nutrients level, encourages rigorous root development, establishment and promotes balanced healthy vegetative growth with abundant flower formation.
- Helps in improvising soil quality and health.
- Dosage: 4 kg/acre



MIKRITE



- Mikrite is a microbial fungicide effective against powdery mildew that causes major damage on different kinds of agricultural crops.
- Mikrite has a systemic action acts as a respiration inhibitor by blocking the electron transfer at fungal mitochondrial membrane. The product shows longevity of more than 15 days control.
- Benefits: • Prophylactic and curative activity • High and long-lasting efficacy • Builds resistance • Widely established MRLs • Beneficial effects on plant health • Yield and quality
- Dosage: Liquid:1-2ml/ltr

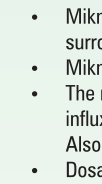
BIO-INSECTICIDES

MIKALL



- Mikall is a microbial insecticide effective against all sucking pests like leaf miners, mealy bugs, thrips, mites and other sucking insects.
- The metabolites present in Mikmine blocks the transmission of nerve and muscle cells by inhibiting glutamate-gated chloride channel. This causes an influx of chloride ions into the cells, leading to hyperpolarisation and subsequent paralysis of invertebrate neuromuscular systems.
- Dosage: Liquid:1-2ml/ltr

MIKMINE



- Mikmine is a microbial insecticide effective against leaf miners and mealy bugs. Mealybug infestations appear on plants as tiny, soft-bodied insects surrounded by a fuzzy, white mess around the stems and leaf nodes.
- Mikmine is also effective against leaf miners which causes major damage on vegetable crops.
- The metabolites present in Mikmine blocks the transmission of nerve and muscle cells by inhibiting glutamate-gated chloride channel. This causes an influx of chloride ions into the cells, leading to hyperpolarisation and subsequent paralysis of invertebrate neuromuscular systems.
- Also at as chitin inhibitor.
- Dosage: Liquid:1-2ml/ltr

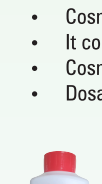


MIKRAKSHA



- Mikraksha is a microbial based insecticide effective against sucking pests like mites, thrips, etc. that causes major damage on all kind of agricultural crops. The product performs well on all crops under different agro-climatic conditions.
- Mikraksha is a contact cum systemic organic insecticide. The product shows longevity of more than 15 days control.
- The extracts which is a blend of different microbes' acts as stomach poison by altering the cell permeability.
- Dosage: Liquid:1-2ml/ltr

COSMO



- Cosmo is a unique combination of biological extracts.
- It contains natural extracts which induces resistance against sucking insects.
- Cosmo performs well on all crops under different agroclimatic conditions.
- Dosage : 1.5ml/ltr



PUNCH



- Punch is a unique combination of biological extracts.
- Punch contains natural extracts which induces resistance against sucking insects.
- Punch performs well on all crops under different agroclimatic conditions.
- Dosage: 2ml/ltr (liquid)

BIO-FERTILIZERS

MIKZOTO

- Mikzoto contains *Azotobacter chroococcum*, nitrogen fixing bio-inoculant suitable for all crops. The product is available as liquid formulation and carrier based formulation.
- Azotobacter is a free-living nitrogen fixing bacterium. Azotobacter lives in association with plant roots and fixes atmospheric nitrogen in readily available form to plants. The product is available as liquid and carrier based.
- Liquid – Viable cell count 1 X 10⁹, pH :- 6.5 - 7.5
- Powder – Viable cell count 5 X 10⁷ • Dosage: 5ml/ltr (liquid), 10gm/ltr (powder)



MIKSPIRAL



- Mikspiral consists of *Azospirillum lipoferum*, a nitrogen fixing bio-inoculant suitable for all crops except legumes.
- Azospirillum is an associative type of bacteria, living in close proximity with the root zone.
- It fixes atmospheric nitrogen, provides 30% to 50% of nitrogen requirement of the plant. Also, produces plant growth hormones such as auxin and cytokinin. The product is available as liquid and carrier based.
- Liquid – Viable cell count 1 X 10⁹, pH :- 6.5 - 7.5 • Powder – Viable cell count 5 X 10⁷
- Dosage: 5ml/ltr (liquid), 10gm/ltr (powder)



MIKOBIMUM

- Mikobium contains *Rhizobium sp.* fixes nitrogen by assimilating atmospheric nitrogen and fixing it in the root nodule, formed in the roots of leguminous plants.
- Rhizobium is root nodule inhabiting, associative symbiotic, nitrogen fixing bio inoculant.
- They are Gram-negative, symbiotic nitrogen-fixing bacteria that form nodules on host plants.
- Liquid – Viable cell count 1×10^8 , pH :- 6.5 - 7.5
- Powder – Viable cell count 5×10^7
- Dosage: 5ml/lit (liquid), 10gm/lit (powder)

MIKPHATE

- Mikphate contains Phosphobacteria - *Bacillus megaterium*, a microbial inoculant capable of solubilizing phosphorus.
- Phosphobacteria can solubilize about 30 kg of insoluble source of phosphorus and making it available to plants.
- Application of phosphobacteria along with nitrogen fixing bacteria promotes growth and yield of the crops by 30%.
- The product is available as liquid and carrier based.
- Liquid – Viable cell count 1×10^8 , pH :- 6.5 - 7.5
- Powder – Viable cell count 5×10^7
- Dosage: 5ml/lit (liquid), 10gm/lit (powder)

MIKTASH

- Miktash contains *Frauteria aurantia*, a microbial inoculant capable of solubilizing potash.
- Miktash converts insoluble form of potash to soluble form by producing organic acids. About 15%-25% of insoluble potash can be solubilized, saving chemical fertilizers significantly. Application of KSB along with nitrogen fixing bacteria promotes growth and yield of the crops by 30%.
- The product is available as liquid and carrier based.
- Liquid – Viable cell count 1×10^8 , pH :- 6.5 - 7.5
- Powder – Viable cell count 5×10^7
- Dosage: 5ml/lit (liquid), 10gm/lit (powder)

MIKZINC

- Mikzinc contains zinc solubilizing bacteria. It is suitable for all crops. The product is available as liquid and carrier based formulation.
- Mikzinc converts insoluble form of zinc to soluble form by producing organic acids.
- The product is available as liquid and carrier based.
- Liquid – Viable cell count 1×10^8 , pH :- 6.5 - 7.5
- Powder – Viable cell count 5×10^7
- Dosage: 5ml/lit (liquid), 10gm/lit (powder)

MIKSULPHUR

- Miksulphur contains sulphur solubilizing bacteria. It is suitable for all crops. The product is available as liquid and carrier based formulation.
- Miksulphur converts insoluble form of sulphur to soluble form by producing organic acids.
- The product is available as liquid and carrier based.
- Liquid – Viable cell count 1×10^8 , pH :- 6.5 - 7.5
- Powder – Viable cell count 5×10^7
- Dosage: 5ml/lit (liquid), 10gm/lit (powder)

BIO-PESTICIDES

MIKCILLIUM

- Mikcillium contains *Verticillium lecanii*, a entomopathogenic fungus that effects and kills mealy bugs and sucking insects like thrips, jassids, aphids, whiteflies and mites.
- Mikcillium performs well under high humidity to enable the entomopathogen to multiply and pathogenise the mealy bug.
- Mikcillium contains spores and mycellial fragments with metabolites of verticillium which works under high humidity, low temperature.
- The product is available as liquid and carrier based.
- Powder: Minimum CFU - 5×10^7 /gm,
- Liquid : minimum CFU - 1×10^9 /ml
- Dosage: 5ml/lit (liquid), 10gm/lit (powder)



MIKDERMA

- Trichoderma viride* is an antagonistic fungus which prevents the crops from diseases such as Root rots, Wilts, Brown rot, Damping off, Charcoal rot and other soil borne diseases in crops.
- It is suitable for Sugarcane, Pulses, Oilseeds, Cotton, Vegetables, Banana, Coconut, Oil palm, Chillies, Lime, Coffee & Tea, Areca nut & Rubber, Flower crops and Spices. Trichoderma are known for their production of several lytic enzymes and, among them T. viride and T. harzianum are commercialized.
- Strains of those species are widely used in biocontrol of soilborne plant-pathogenic fungi occurring in the most extreme to the most mundane of habitats. The product is available as liquid and carrier based.
- CFU- 1×10^7 (CFUs)/g. • Dosage: 5ml/lit (liquid), 10gm/lit (powder)

MIKMONAS

- Mikmonas contains Antagonistic *Pseudomonas fluorescens* is a microbe with high antibiosis potentia.
- It enters the plant vascular system, and reaches the various parts of the plant system and acts as systemic bio-control agent against various fungal and bacterial diseases such as Pythium spp., Phytophthora spp., Rhizoctonia solani, Fusarium spp, Botrytis cinerea, Sclerotium spp., Sclerotinia sp. and Ustilago spp.
- The product is available as liquid and carrier based.
- Liquid formulation - minimum population of 1×10^9 (CFUs)/ml
- Carrier formulation - minimum population of 1×10^8 (CFUs)/g
- Dosage: 5ml/lit (liquid), 10gm/lit (powder)



MIKPAECILO

- Mikpaecilo is a *Paecilomyces lilacinus* based product. Paecilomyces are basically filamentous fungus, effective against plant parasitic nematodes.
- Paecilomyces lilacinus is a common saprophytic, entomopathogenic, mycoparasitic, saprophytic, as well as nematophagous, filamentous fungus. It is parasitic on nematodes infecting eggs, juveniles, and adult females of root-knot and cyst nematodes.
- Paecilomyces lilacinus has shown promising results for use as a biocontrol agent to control the growth of destructive root-knot nematodes. Paecilomyces protects the roots against plant parasitic nematodes, specifically root-knot nematodes (Meloidogyne spp.), Banana nematodes (Radopholus similis) reniform nematode (Rotylenchulus reniformis), and citrus nematodes (Tylenchulus semipenetrans). These nematodes infect horticultural crops of economic importance.
- Mikpaecilo is recommended as prophylactic control measure for all crops like Vegetable crops and horticultural crops and plantation crops like Banana
- CFU- 1×10^7 (CFUs)/g. • Dosage: 5ml/lit (liquid), 10gm/lit (powder)



SPREADER / WETTING AGENT

MIKBOND

- Mikbond when added to the spray mix, helps coverage of the product on the plant material and to slow chemical residue loss.
- Mikbond acts as a surfactant that reduces the surface tension of water. This allows the product to spread across the leaf more uniformly and allows the active ingredient to be better absorbed by the plant.
- Mikbond increases the adhesion of spray drops to the leaf and slows loss of the chemical by rain.
- Application: Recommended for all crops
- Dosage: 0.5ml/lit



Registered Office :

Miklens Bio Pvt. Ltd.

Sparsh, No. 3, Divine Bungalows, Marian Colony, Borivali West, Mumbai - 400 103.

Corporate Office : #70/1, H.K.K. Industrial Estates, Cheemasandra, Biderahalli - Hobli, Virgonagar Post, Bangalore 560049.

Customer Care No.: +91 9900449004 Email : care@miklensbio.com • Web : www.miklensbio.com



Microbial Movement for Agriculture Improvement

