

Modicare Agriculture Range



FAIRPLAY

QUALITY

CREATIVITY & INNOVATION

TEAMWORK

Why Modicare Agriculture Range



- Product are developed under R&D support from Market leaders
- Product s are tested on various crops and vegetation by various Agriculture Universities
- We offer Versatile products for different needs

Active-80

A Product for Agricultural Use



India is primarily an agricultural country.
What can be the better way to salute our
farmers than to introduce a product for
them?

Cropping Seasons

Kharif: Crops grown in summer like rice, jowar, bajra, maize, cotton and groundnut.



Rabi: Crops grown in winter like wheat, barley, gram, mustard.



Crops Grown in Various States

CROP	STATES
Wheat	UP, MP, Punjab, Bihar, Rajasthan, Haryana, Maharashtra, Gujarat, Bihar, West Bengal
Gram	U.P, M.P, Rajasthan, Haryana
Jowar	Maharashtra, Karnataka, A.P
Sugarcane	U.P, Haryana, Bihar, Punjab, Maharashtra, A.P, Tamil Nadu, Karnataka
Tobacco	A.P, Gujarat, Karnataka, Maharashtra, Tamil Nadu
Potato	U.P, Bihar, W.B, Assam, Orissa
Rubber	Kerela, Tamil Nadu, Karnataka

Crops Grown in Various States

CROP	STATES
Cashew	Kerela,Karnataka,A.P,Tamil Nadu, Maharashtra
Tea	W.B,Tripura,Assam,Kerela,Karnataka, Tamil Nadu
Coffee	Kerela,Tamil Nadu,Karnataka
Onion	Maharashtra,Karnataka,A.P, Tamil Nadu, W.B,M.P,Orissa,Punjab
Chilies	A.P,Maharashtra,Karnataka, M.P Tamil Nadu
Coriander	A.P,Rajasthan,M.P,Tamil Nadu
Jute	W.B, North Eastern Region, Bihar, Orissa

Crops Grown in Various States

CROP	STATES
Bajra	Rajasthan,Gujarat,U.P,Maharashtra
Fruits and Vegetables	All States
Cotton	Maharashtra,Gujarat,Karnataka,M.P, Punjab,A.P,Tamil Nadu,Haryana
Maize	U.P,Bihar,Rajasthan,M.P,Punjab Gujarat, J&k, H.P, A.P
Soybean	M.P,Karnataka
Paddy	Assam,W.Bengal,Coastal Orissa,A.P,Kerela Tamil Nadu,Karnataka
Barley	Rajasthan
Mustard	Rajasthan, Gujrat, U.P

About Pesticides

- Herbicide: A material used primarily for the control of weeds. *Herbicides are used in five general ways:*
- **Preplanting stage:** Applied to the soil after it has been prepared for seeding.
- **Preemergence (Contact):** Non-residual dosages are added after seeding but before the emergence of the crop seedlings.
- **Preemergence (Residual):** Applied at time of seeding or Just prior to crop emergence; kills weed seeds and germinating seedlings.
- **Postemergence:** Application after emergence of a crops.
- **Sterilant (Nonselective)** Used to effect a complete kill of All treated plant life.

- Insecticides are used primarily for the control of insects.
- The various insecticides fall into six general categories:
- **Stomach:** Toxic quantities are ingested by the insect.
- **Contact:** Kills upon contact with an external portion of the body.
- **Residual contact:** Remains toxic to insects for long periods after application.
- **Fumigant:** Possesses sufficient natural or induced vapor pressure to produce lethal concentrations.
- **Repellent:** Does not kill but is distasteful enough to insects to keep them away from treated areas.
- **Systemic:** Capable of being absorbed into the plant system where they make plant parts insecticidal.

- **Fungicides** are used on farm crops, preferably as protective rather than curative treatments applied to the surface of the plant in water suspensions or dusts before attack of a fungus.
- **Deciduous** fruit trees and numerous vegetable crops and ornamentals, as well as germinating seeds, are usually subject to attack unless protected.
- **Fungicides** include inorganic forms of copper and sulfur, mercury, and metallic complexes of cadmium, chromium, and zinc along with a wide variety of organic compounds and Materials used in control of specific plant diseases. Use of some metallic compounds, especially mercurials, is now forbidden in many countries because of the hazard of poisonous residues.
- Some organic fungicides are systemic in action, absorbed and distributed within the plant.

- **Fertilizer** : Any natural or manufactured material added to the soil in order to supply one or more plant nutrients. The term is generally applied to manufactured materials other than lime or gypsum.
- **Foliar Application**: Application of a chemical preparation to the leaves or foliage of plants.
- **Defoliators**: Chemicals used to curb the growth of leaves.

What Is Active-80?

- Active-80 is a universal nonionic spray adjuvant concentrate .
- It is a Activator-Wetter-Spreader for Pesticides.
- Active-80 when added to pesticide mixture (fungicides, herbicides and insecticides) , foliar fertilizers, defoliators, and plant nutrients increases their performance and effectiveness.
- It helps them in better control of insects, weeds and disease on crops.

How Active-80 Improves the Performance of Pesticides

- For a pesticide to perform its function properly, a spray droplet must be able to wet the foliage and spread out uniformly over a leaf so that maximum area of leaf is covered and the pesticide reaches its target. Does it really happen? No
- Spray droplets bead up on the leaf surface particularly on Waxy and hairy leaves which does not wet the foliage and spread out uniformly.
- This is due to surface tension between spray droplet and leaf surface.
- By mixing Active-80 with the pesticide solution, it reduces the surface tension and prevents beading of droplets.
- It increases the wet ability and uniform coverage of the pesticide and helps it to reach its target resulting in better performance of the pesticides.

Magic of Active-80



**Pesticide sprayed
Without surfactant**

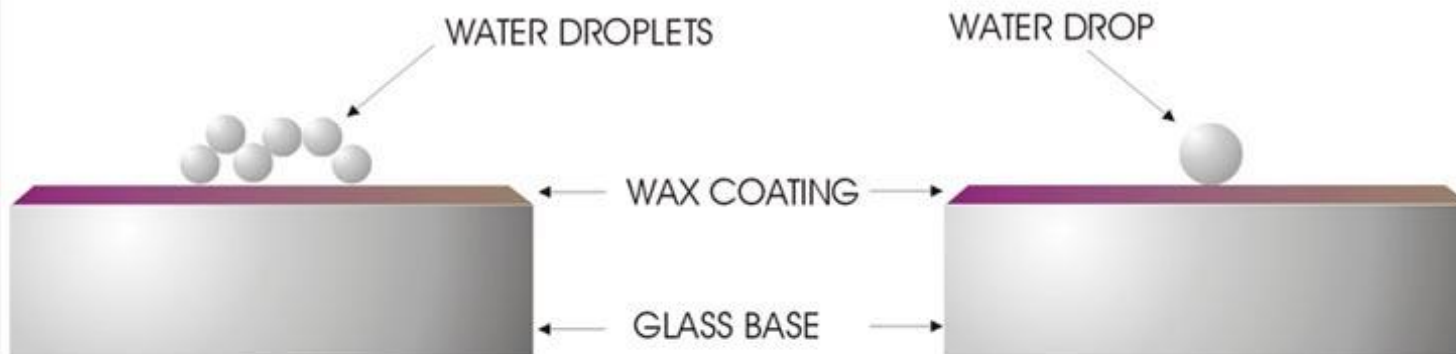


**Pesticide sprayed
with Active-80**

What is Surface Tension

SURFACE TENSION

SURFACE TENSION is the tendency of the surface molecules of a liquid to be attracted towards the centre of the liquid body.

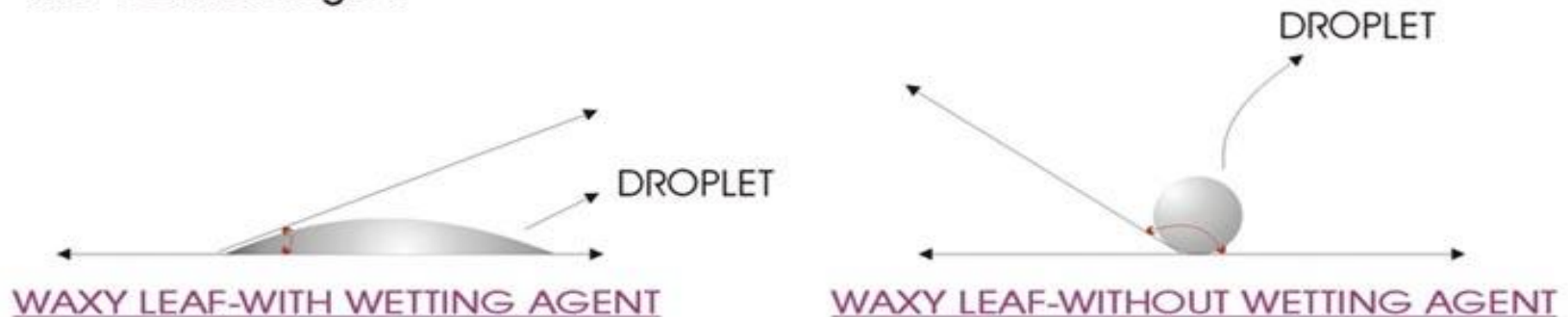


Since water molecules are attracted to each other causing surface tension, a nearly spherical droplet is formed.

Wetting Agents:

A wetting agent increases a liquid ability to moisten a solid. It does the job by lowering surface tension (interfacial), bringing the liquid into intimate contact with the solid.

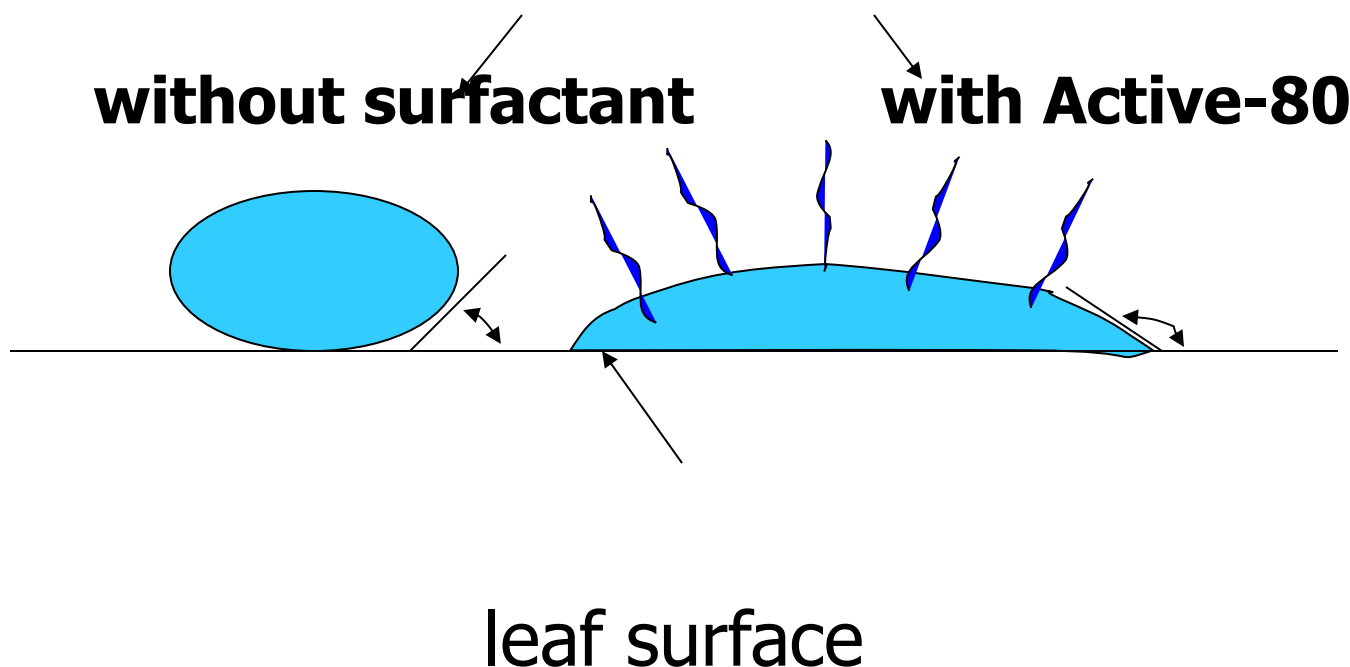
The degree of effectiveness of a wetting agent is determined by measuring the "contact angle".



Wetting Agents are useful at low gallonage sprays. At very high gallonages, they increase run off from leaf surfaces, and wastage of pesticide..

- Active-80 plays an important role in contact and translocating herbicides
- Since contact herbicide kills only the part of the plant they cover, therefore improved coverage is necessary
- The wetting and dispersing action of Active-80 helps the contact type herbicides to prolong their action and prevents them from being washed away
- Active-80 when used with translocating herbicides breaks the surface tension present on waxy and hairy surfaces and facilitate penetration of herbicides deep in the leaf

Barriers to herbicide penetration



Spray droplets bead up on waxy plant surfaces. Surfactants reduce the surface tension and increase the wettability of the spray solution, greatly increasing the penetration of agricultural chemical to the site of action.

- Active-80 when used with fungicides and insecticides acts as a good spreader and increases the coverage for controlling fungus and insects.
- It assists in spreading insecticide and fungicide as much on the Plant surface so that the insect and fungus can be reached quickly in order to prevent greater damage to the plant.
- For the wetting and penetration action on waxy and hairy surfaces and for rapid absorption and translocation of pesticides, Active-80 performs excellent.

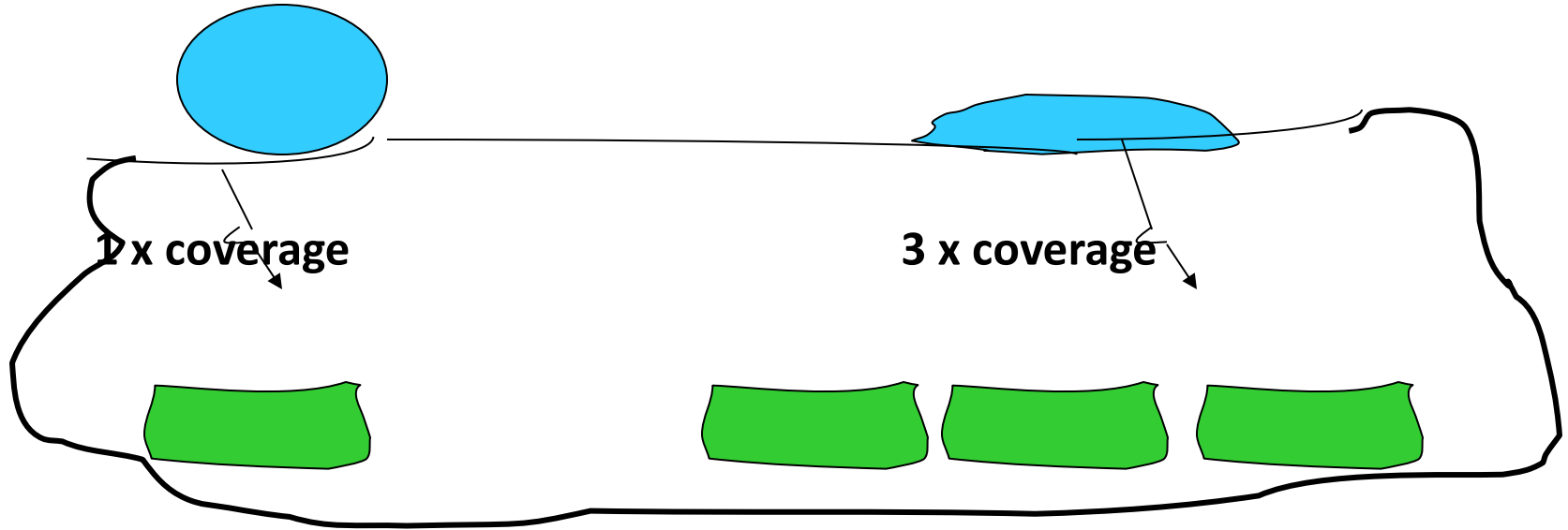
Active-80 effect on spreading and surface wetting



Agricultural chemical

Ordinary surfactant

Active-80



Epidermal cells (where photosynthesis, cell disruption, growth inhibition, contact or amino acid agro chemicals are most effective)

Active-80 in Irrigation

- Active-80 can be used as an effective irrigation aid.
- Active-80 when used with water reduces surface tension and makes the soil to absorb the water deep and fast

Features and Benefits of Active-80

Concentrated	80% active ingredients with Rheology Modifiers No particle charge . Do not ionize in water therefore suitable with most pesticides.
Nonionic	In the presence of usual salts and chemicals. Prevents wasteful runoff and wash off . Performs in hard and warm water.
Chemically Inactive	Allows uniform spread of spray deposit .
Spreader	Enables the spray fluid to moisten plant surface.
Wetter	Helps in penetrating action on waxy and hairy surface of the plant thus improving the performance of the pesticides. Facilitates uniform mixing of powders,most liquid fertilizers and pesticides.
Activator	Does not burn the crops and plants.
Compatible	
Non Phytotoxic	
Improves the absorption of water and pesticides in soil	
Non Corrosive to spray equipment and prevent clogged nozzles	

Concentrated Formula

- Active-80 is highly concentrated with 80% active ingredients.
- It is a special formula with Rheology Modifiers.
- The high concentration of active ingredients makes it extremely powerful and results in better functioning of pesticides
- The high performance reduces the repeated use of pesticides and helps the farmer in saving money.

Non Ionic in Nature

- Active-80 is nonionic i.e there is no particle charge .
- They do not ionize in water therefore suitable with most pesticides.
- They are chemically Inactive in the presence of usual salts and chemicals.
- They Perform in hard and warm water also.

Activator-wetter-spreader

- In addition to the surfactant in the formulation, a suitable wetter has been added which increases the efficiency of Active-80 as an activator/carrier.
- Further, suitable additives have been added to the formulation to ensure uniform spreading of the agricultural molecule on the substrate.
- These qualities make Active-80 a better bargain for farmers who can reduce and utilize their pesticide in an economical way.

Completely safe & Non Phytotoxic

- Active-80 is non phytotoxic.
- It does not harm or burn the crops.
- The product has been tested and found to be completely safe.

Compatible, Non Corrosive

- Active-80 facilitates uniform mixing with most pesticides, fertilizers, defoliators, powders, oil base liquids.
- The universal application helps the farmer to save time and money by avoiding Different pesticides with different surfactants.
- The chemical composition of Active-80 is so made that it helps prevent rusting of spray tank and other equipment.
- It further prevents clogging of nozzles and keeps the equipment clean.

How Active-80 Helps the Farmers

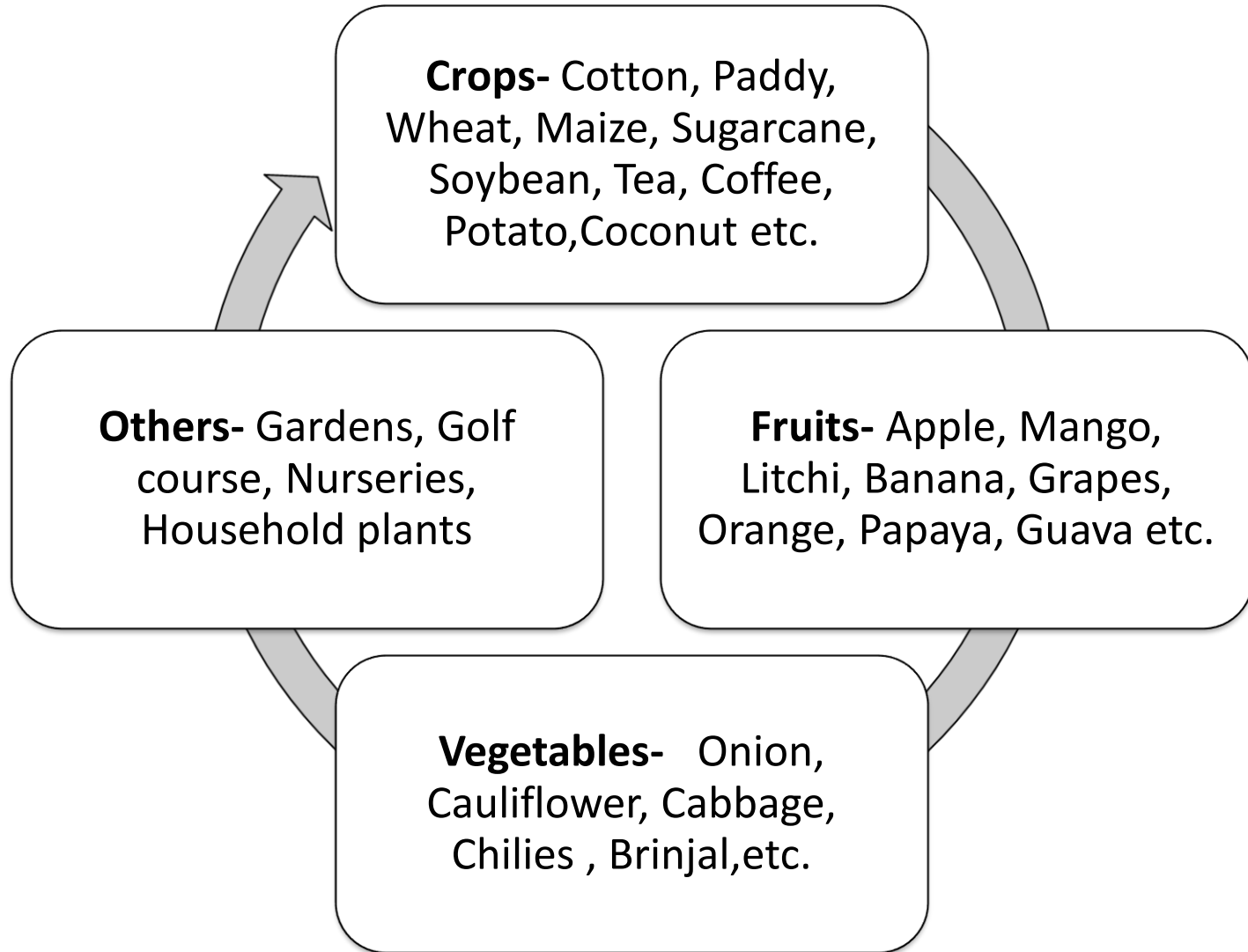
- It helps the farmers in better and healthy crop yield.
- It helps the farmer in efficient use of pesticides.
- It helps the farmer in reducing pesticide use.
- It helps in efficient use of water in irrigation
- Helps in greater moisture availability in root zone of plants
- It helps the farmer by saving time and money.

Where Active-80 can be used

- Active-80 can be used wherever pesticides, fertilizers, defoliators, plant nutrients are being applied.

It can be used for

- ✓ Agricultural purpose
- ✓ Horticulture
- ✓ In golf courses,
- ✓ In household plants,
- ✓ In nurseries,
- ✓ In kitchen gardens ,etc



Dosage Directions

Amount to Use	
With Insecticides, Fungicides, Foliar Fertilizer, Defoliator Plant Nutrients	5ml in 15 liters of water
With Herbicides	20 ml in 15 liters of water
For irrigation	160ml in 80 liters of water per acre.

Directions for Use

- Mix required quantity of Active-80 with 15 liters of water.
- To this solution add recommended doses of the pesticide as per pesticide label instruction.
- Mix thoroughly.

Note :Read pesticide labels carefully for specific mixing instructions .

Safety Precautions and First Aid

Safety Precautions :

Keep out from reach of children. Avoid eye contact. Avoid breathing spray mist. Avoid skin contact.

Recommended to wear goggles, face mask and gloves while spraying.

First Aid :

If swallowed accidentally induce vomiting and call a physician. If it get into eyes flush with plenty of water and get medical attention. For skin contact, wash with soap and water.

Storage Direction

- Combustible Liquid. Do not expose to direct sunlight and excess heat. Store in a cool place.
- Always close the bottle when not in use.

- **For Fungicides, Insecticides, Foliar fertilizers, defoliators and Plant Nutrients.**

One bottle of 500ml of Active-80 will be sufficient for
100 spray tanks of 15 liter capacity

Cost per use- Rs 4.25 per spray tank

- **For Herbicides**

One bottle of 500ml of Active-80 will be sufficient for
25 spray tanks of 15 liters capacity

Cost per use- Rs. 17 per spray tank

- **In Irrigation** :One bottle of 500 ml will be sufficient
for more than 3 acres.

Cost per use- Rs. 136 per acre

Active-80 - Price Information

Product	Pack	MRP (RS.)	DP
Active 80	3x100 ml	315	265
	500 ml	425	370
	5l	3850	3350

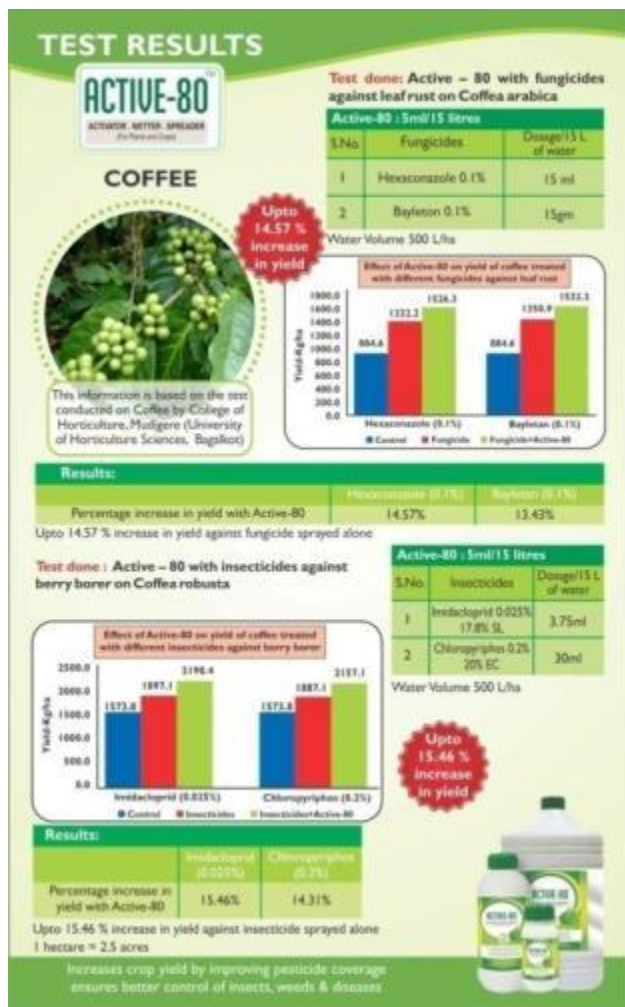


Product Test Results by Agricultural Institutes & Universities



Active-80 Test Results on Coffee

conducted by College of Horticulture , Mudigere

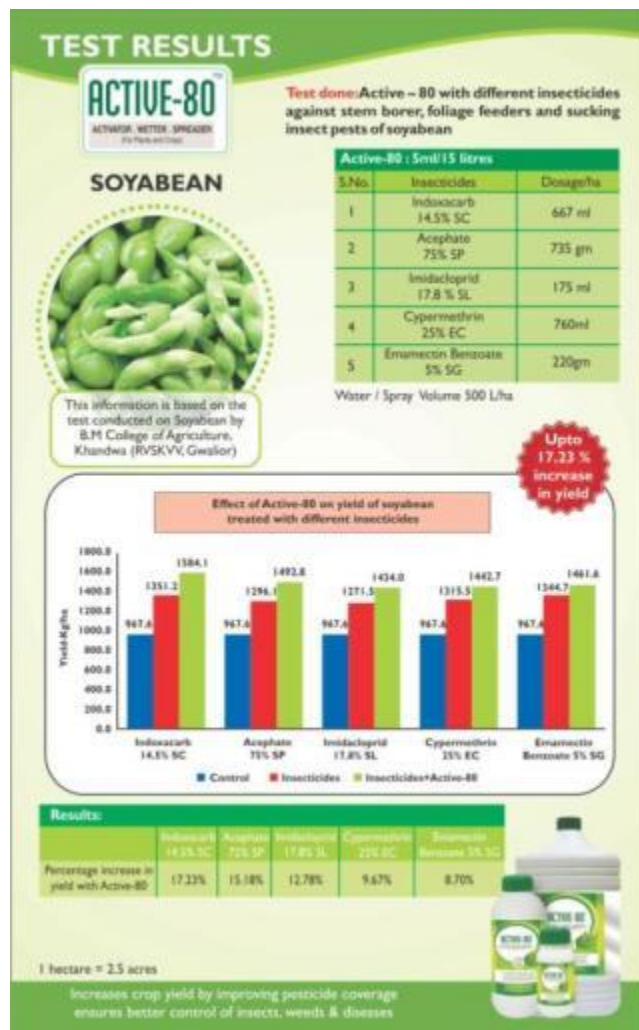


Effect of Active-80 with fungicides against leaf rust on Coffea arabica –
Upto 14.57% increase in yield

Effect of Active-80 with fungicides against berry borer on Coffea robusta–
Upto 15.46% increase in yield

Active-80 Test Results on Soyabean

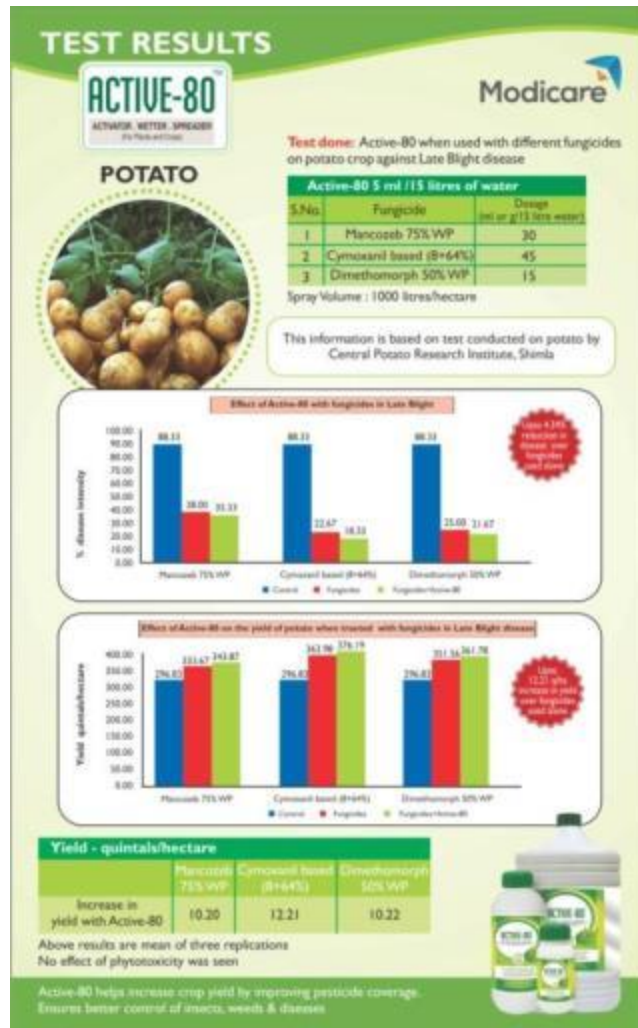
conducted by BM College of Agriculture, Khandwa



Effect of Active-80 with different insecticides against stem borer, foliage feeders and sucking insect pests of soyabean -
Upto 17.23% increase in yield

Active-80 Test results on Potato

conducted by Central Potato Research Institute, Shimla



Effect of Active-80 used with different fungicides on potato crop against Late blight disease-

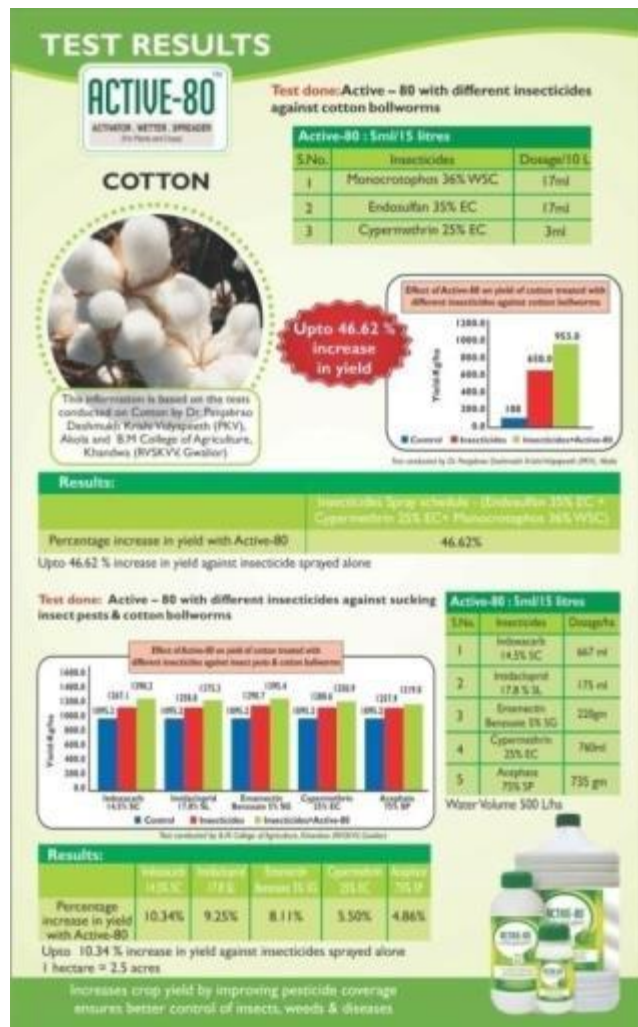
Upto 4.34% reduction in disease over fungicides used alone.

Upto 12.21 q/ha increase in yeild over fungicide used alone.

Active-80 Test results on Cotton

conducted by Dr. Panjabrao Deshmukh Krishi Vidyapeeth.

Akola, & BM College of Agriculture, Khandwa

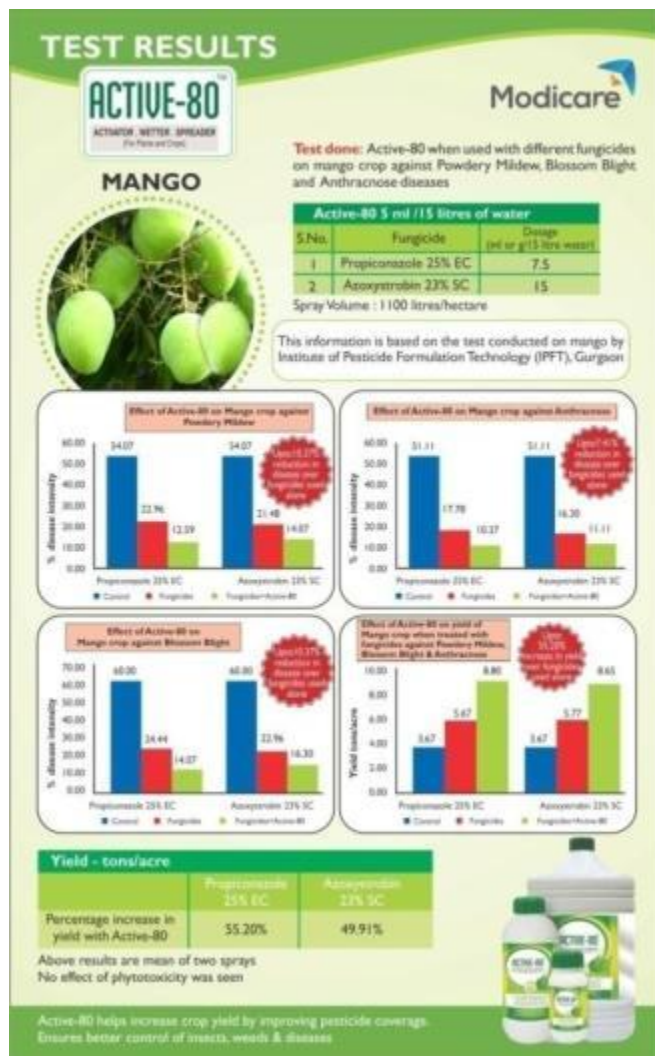


Effect of Active-80 used with different insecticides against insect pests & cotton ball worms

Upto 46.62% increase in yield.

Active-80 Test results on Mango

conducted by Institute of Pesticide Formulation Technology, Gurgaon



Effect of Active-80 on Mango crop against Mildew

Upto 10.37% reduction in disease over fungicides used alone.

Effect of Active-80 on Mango crop against Anthracnose

Upto 7.41% reduction in disease over fungicides used alone.

Effect of Active-80 on Mango crop against Blossom Blight

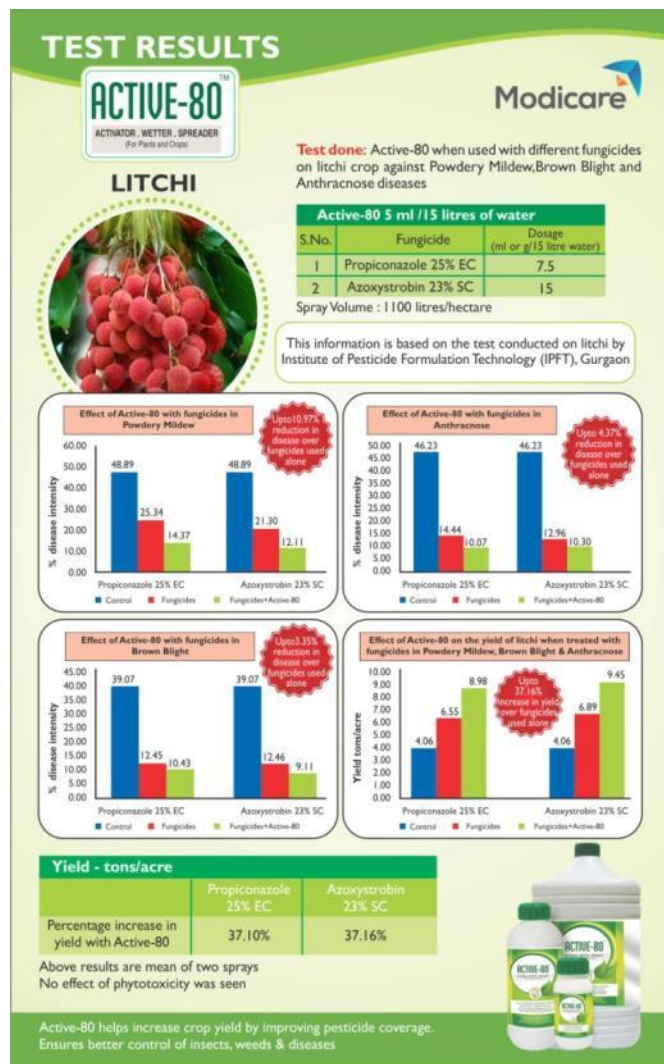
Upto 10.37% reduction in disease over fungicides used alone.

Effect of Active-80 on Mango crop against Blossom Blight, Powdery Mildew and Anthracnose.

Upto 55.20% increase in yield over fungicides used alone.

Active-80 Test results on Litchi

conducted by Institute of Pesticide formulation Technology, Gurgaon



Effect of Active-80 on Mango crop against Powdery Mildew
Upto 10.97% reduction in disease over fungicides used alone.

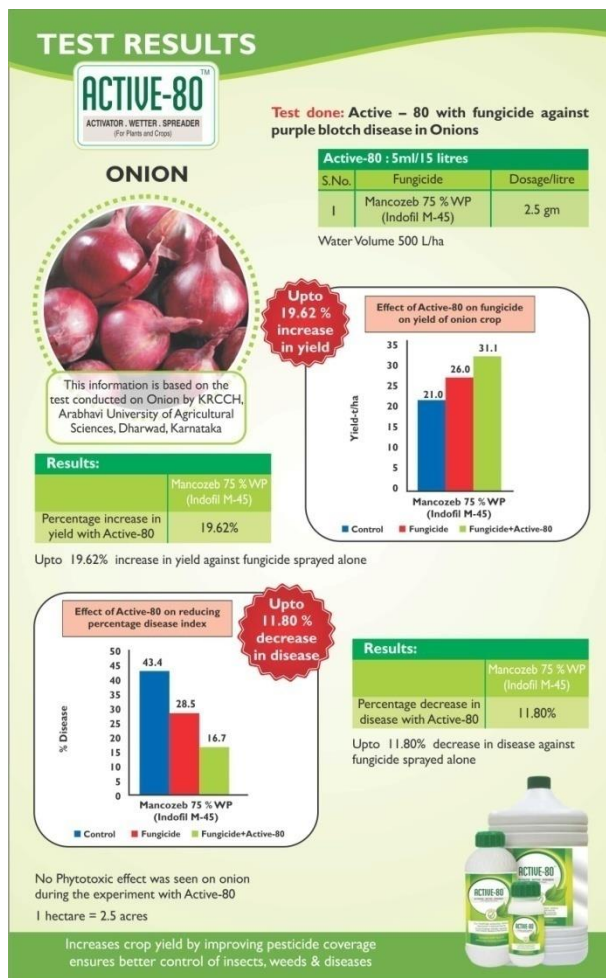
Effect of Active-80 on Mango crop against Anthracnose
Upto 4.37% reduction in disease over fungicides used alone.

Effect of Active-80 on Mango crop against Blossom Blight
Upto 3.35% reduction in disease over fungicides used alone.

Effect of Active-80 on Mango crop against Blossom Blight, Powdery Mildew and Anthracnose.
Upto 37.16% increase in yield over fungicides used alone.

Active-80 Test results on Onion

conducted by KRCCH Arbhavi University of
Agriculture Sciences, karnataka

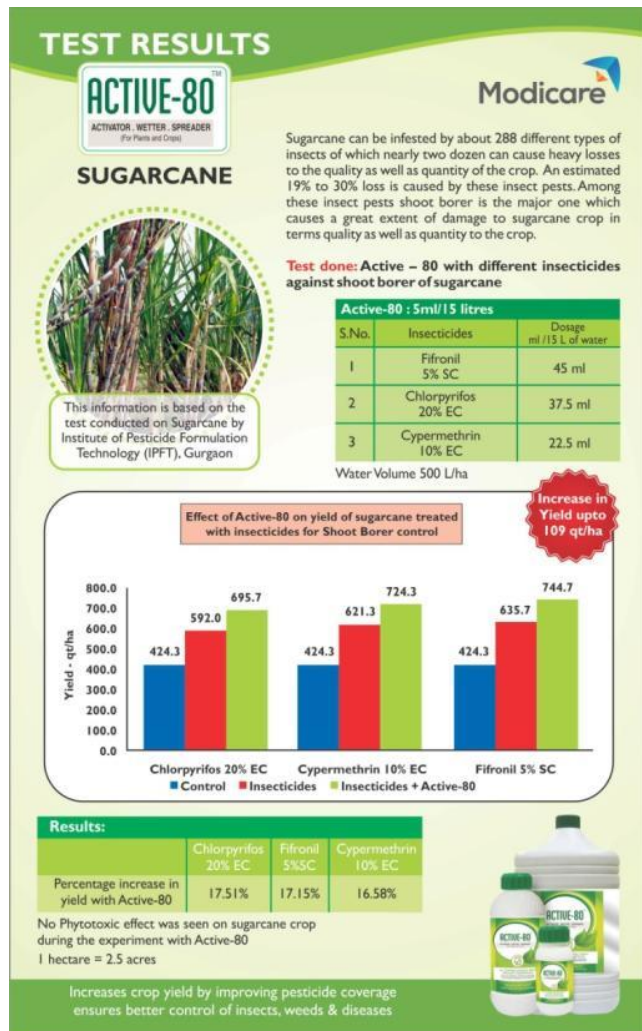


Effect of Active-80 on Onion against Purple Blotch Disease
Upto 19.62% increase in yield over fungicides used alone.

Upto 11.80% reduction in disease over fungicides used alone.

Active-80 Test results on sugarcane

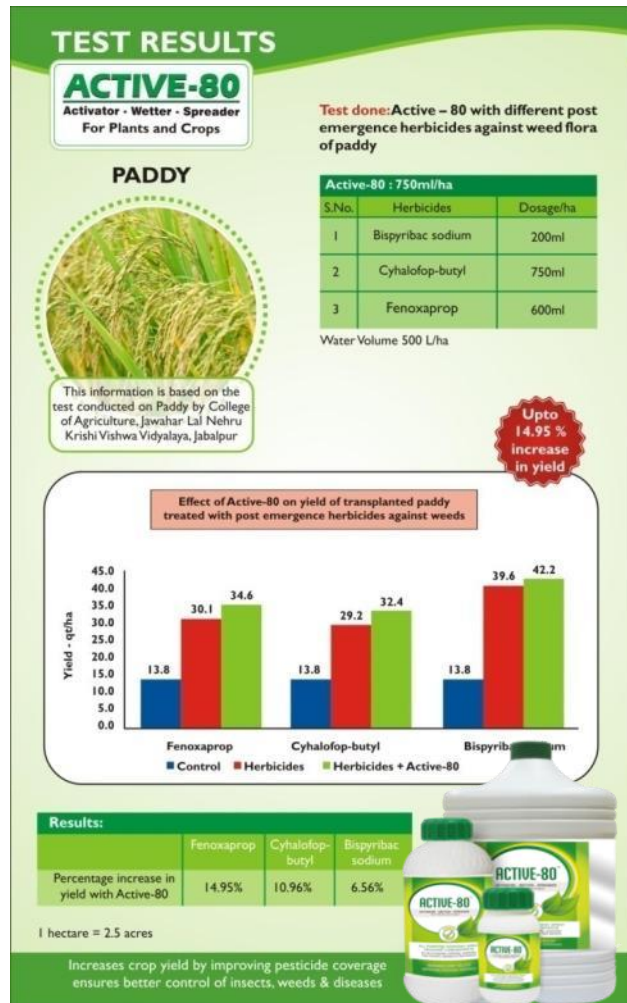
conducted by Institute of Pesticide formulation Technology,
Gurgaon



Effect of Active-80 on Sugarcane
against shoot borer of sugarcane
**Upto 109 qt/ha increase in yield over
fungicides used alone.**

Active-80 Test results on Paddy

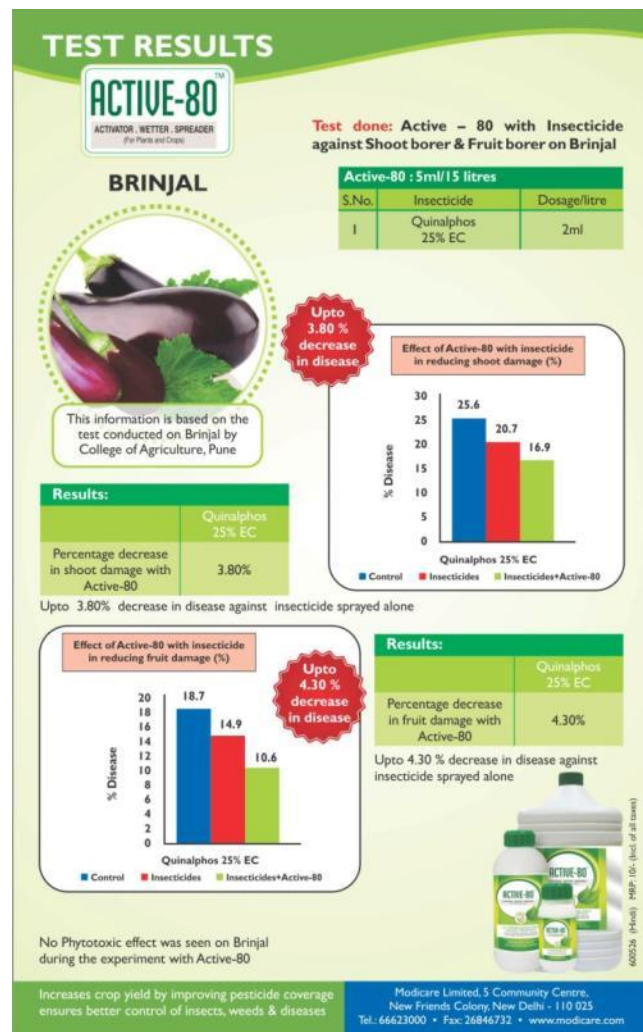
conducted by College of Agriculture , Jawaharlal Nehru
Krishi Vishwa Vidyalaya, Jabalpur



Effect of Active-80 on paddy treated with post emergence herbicides against weeds
Upto 14.95% increase in yield over fungicides used alone.

Active-80 Test results on Brinjal

conducted by College of Agriculture , Jawaharlal
Nehru Krishi Vishwa Vidyalaya, Jabalpur



Effect of Active-80 on Brinjal against shoot borer and fruit borer of brinjal
Upto 3.80% and 4.30% decrease in disease over fungicides used alone.

Active 80 is approved by Tea Research Association

TEST RESULTS

ACTIVE-80™
ACTIVATOR · WETTER · SPREADER
(For Pests and Crops)

TEA

Tea Research Association, Tocklai Experimental Station, Jorhat, Assam has approved and certified Active-80 for use in combination with insecticides, fungicides and herbicides as spreading /sticking agent for control of insect pests, diseases, and weeds of tea and ancillary crops. The suggested dosage is 5 ml of Active-80 in 10 litres of spray fluid containing pesticides.

TEA RESEARCH ASSOCIATION
TOCKLAI EXPERIMENTAL STATION
JORHAT - 785 008 (ASSAM)

CERTIFICATE
No. 477

This is to certify that **Active 80** manufactured by **M/S Modicare Ltd., New Delhi** has been tested and approved for use in combination with insecticides, fungicides and herbicides in member tea estates of Tea Research Association in North East India for control of insect pests, diseases and weeds of tea and ancillary crops.

This certificate is valid for the period: **03.01.2012 - 02.01.2015**

Details of Approval

Test completed	Test 1 and testing
Method of application	5 ml in 10 litres of spray fluid.
	Mix Active 80 with little water and then add to the required quantity of spray fluid containing insecticides/fungicides/herbicides and stir well before application.
Residue tolerance	Not required.
Remarks	It to be used with recommended insecticides, fungicides and herbicides as spreading/ sticking agent during rainy days.

Co-ordinator
Evaluation & Certification of Agrochemicals

Active-80 helps increase crop yield by improving pesticide coverage. Ensures better control of insects, weeds & diseases

Modicare Limited, 5 Community Centre,
New Friends Colony, New Delhi - 110 025
Tel: 66623000 • Fax: 26846732 • www.modicare.com

Tea Research Association, Tocklai Experimental Station, Jorhat, Assam has approved and certified Active-80 for use in combination with insecticides, fungicides and herbicides as spreading /sticking agent for control of insect pests, diseases, and weeds of tea and ancillary crops. The suggested dosage is 5 ml of Active-80 in 10 litres of spray fluid containing pesticides.

Product Demonstrations

Active -80



Objective

- To show **Active-80** as powerful tool in irrigation

Material Required

- Active- 80 , Two cardboard pieces (corrugated carton pieces of 5 ply or more), Two glass tumblers , Plain water, Droppers

Method

- Take water in two glass tumblers
- Put few drops of Active-80 in one tumbler only
- Dip the cardboard piece in the tumblers containing Active-80 solution & plain water
- Wait for 5-10 seconds
- Remove the cardboard pieces and peel them layer-by-layer.

Result

- All the layers of the cardboard piece dipped in Active-80 solution are wet as compared to the one dipped in plain water. Water added with Active-80 easily penetrates deep into the layers as compared to plain water. The same logic can be applied to the soil as the soil has number of layers. When Active-80 is added to water in irrigation, it increases the wetting property of water. This reflects the property of **Active-80 as a powerful tool in irrigation.**

Demo 2

Objective

- To show the uniform spreading and wetting effect of Active-80

Material Required

- Two glasses, Active-80 , Water, Dropper, Two leaves

Method

- Fill both the glasses to half with water
- Add four drops of Active-80 to one of the glasses
- Mix the solution
- Take a leaf and dip half portion of the leaf in the glass containing plain water
- Take another leaf and dip half portion of the leaf in the glass containing Active-80 solution
- Remove the leaves

Result

- The leaf dipped in Active-80 is uniformly wet while the other dipped in plain water remains partially wet.
- This shows the uniform spreading and wetting effect of Active-80.

Objective

- To show Active-80 as a Activator -Wetter-Spreader

Materials required

- Active- 80 , Two cardboard pieces (3 ply), Water, Pin, Dropper

Method

- Take two cardboard pieces. Put a drop of water on both the cardboards with the help of a dropper. The water will form a droplet on the cardboards due to surface tension. Take a pin and dip the tip in Active-80 . Touch the pin to one of the droplets. The droplet will de-bead and spread on the surface of the cardboard and also wet the layers of cardboard. This is due to breaking of surface tension. The droplet on the other cardboard maintains its beading.

Result

- This reflects the properties of Active-80 as a Wetter-Spreader-Activator.

Thank
you

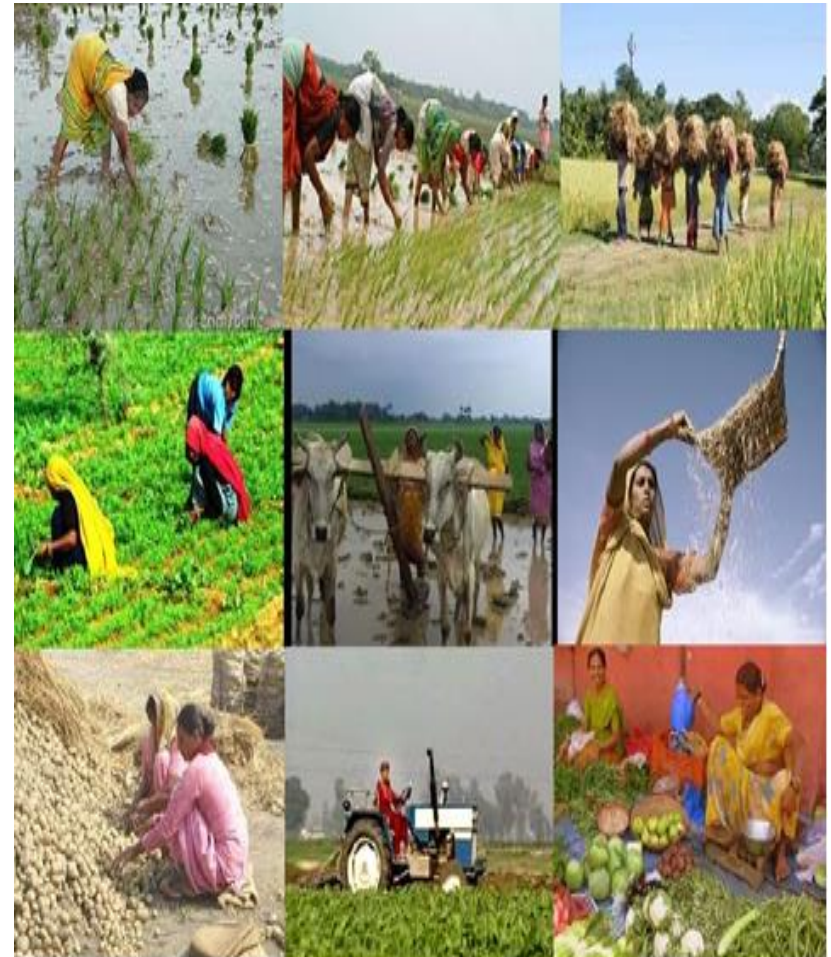
Grow Gold on Trees

Modicare 



Indian Agriculture: Changing Landscape

- Gaining significance with industrialization
- Shrinking base
- Increasing input cost and less profitability
- Looking for effective use of water
- Farmers raring to export to get better pricing of their produce
- Increasing soil toxicity with indiscriminate chemicals use
- Chemicals and fertilizers causing harm to soil and productivity
- Posing threat to environment
- Reduced performance and effectiveness of pesticide



Presenting Active-80 Gold

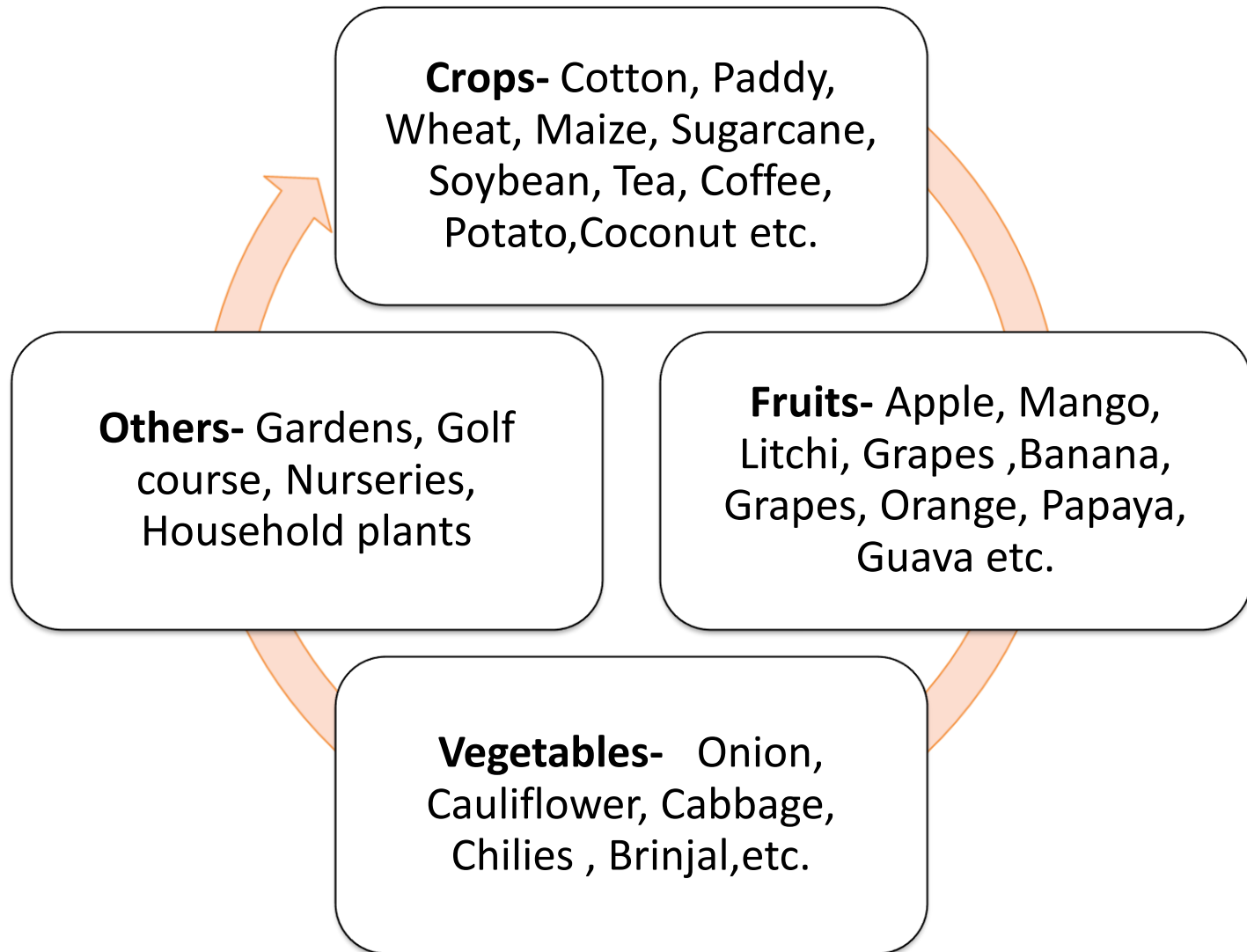


**Activator!
Wetter!
Spreader!
With Natural ,
Vegetable based
Surfactants**

Ecofriendly and Biodegradable

Features and Benefits

- Natural vegetable based surfactants
- Eco-friendly and biodegradable. Safe on crops
- Friendly for domestic and export oriented crops where use of highly synthetic surfactants is an issue
- Quicker, Faster and Uniform spreading of spray deposits than most surfactants
- Highly concentrated with 80% active ingredients
- Spreader: Allows uniform spread of spray deposits
- Wetter: Enables the spray fluid to moisten plant surface effectively
- Activator: Helps in permeating action on waxy and hairy surface of the plant thus improving the performance of the pesticides
- Helps absorb water effectively in root zone of plants & crops
- Help avoid frequent use of insecticides, fungicides, herbicides, plant nutrients foliar fertilizers, defoliators by efficiently utilizing them
- Suitable with most pesticides
- Facilitates uniform mixing of powders, most liquid fertilizers and pesticides.
- Non-corrosive to spray equipment and prevents clogged nozzles.



- **For Fungicides, Insecticides, Foliar fertilizers, defoliators and Plant Nutrients.**

One bottle of 500ml of Active-80 will be sufficient for
100 spray tanks of 15 liter capacity

Costs only Rs 4.95 per spray tank (15 litres)

- **For Herbicides**

One bottle of 500ml of Active-80 will be sufficient for
25 spray tanks of 15 liters capacity

Costs only Rs 19.80 per spray tank (15 litres)

- **In Irrigation**

One bottle of 500 ml will be sufficient for more than 3 acres.

Costs only Rs 158.40 per acre

Active -80 Gold Price Information

Product	Pack	MRP (RS.)	DP
Active 80 Gold	500 ml	495	435



Product Demonstrations

Active -80

Gold



Objective

- To show Active-80 Gold as powerful tool in irrigation

Material Required

- Active- 80 Gold, Two cardboard pieces (corrugated carton pieces of 5 ply or more), Two glass tumblers , Plain water, Droppers

Method

- Take water in two glass tumblers
- Put few drops of Active-80 Gold in one tumbler only
- Dip the cardboard piece in the tumblers containing Active-80 Gold solution & plain water
- Wait for 5-10 seconds
- Remove the cardboard pieces and peel them layer-by-layer.

Result

- All the layers of the cardboard piece dipped in Active-80 Gold solution are wet as compared to the one dipped in plain water. Water added with Active-80 Gold easily penetrates deep into the layers as compared to plain water. The same logic can be applied to the soil as the soil has number of layers. When Active-80 Gold is added to water in irrigation, it increases the wetting property of water. This reflects the property of Active-80 Gold as a powerful tool in irrigation.

Demo 2

Objective

- To show the uniform spreading and wetting effect of Active-80 Gold

Material Required

- Two glasses, Active-80 Gold, Water, Dropper, Two leaves

Method

- Fill both the glasses to half with water
- Add four drops of Active-80 Gold to one of the glasses
- Mix the solution
- Take a leaf and dip half portion of the leaf in the glass containing plain water
- Take another leaf and dip half portion of the leaf in the glass containing Active-80 Gold solution
- Remove the leaves

Result

- The leaf dipped in Active-80 Gold is uniformly wet while the other dipped in plain water remains partially wet.
- This shows the uniform spreading and wetting effect of Active-80Gold.

Objective

- To show Active-80 Gold as a Activator -Wetter-Spreader

Materials required

- Active- 80 Gold, Two cardboard pieces (3 ply), Water, Pin, Dropper

Method

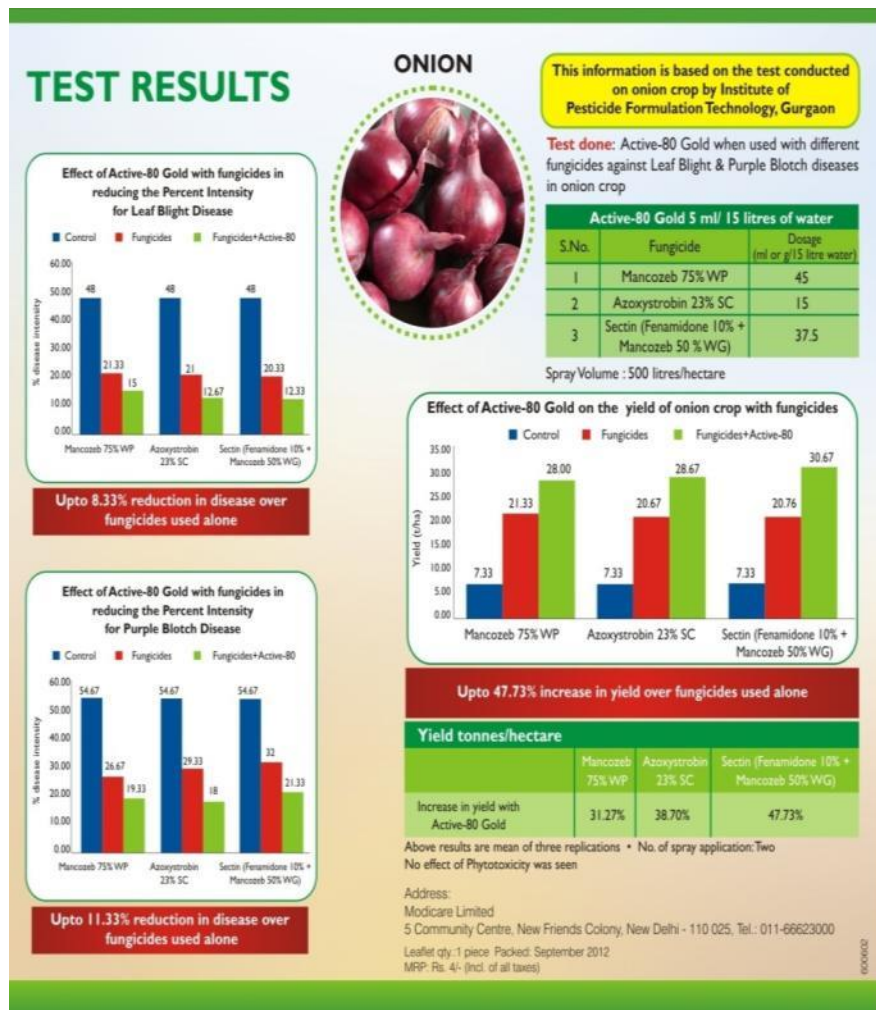
- Take two cardboard pieces. Put a drop of water on both the cardboards with the help of a dropper. The water will form a droplet on the cardboards due to surface tension. Take a pin and dip the tip in Active-80 Gold. Touch the pin to one of the droplets. The droplet will de-bead and spread on the surface of the cardboard and also wet the layers of cardboard. This is due to breaking of surface tension. The droplet on the other cardboard maintains its beading.

Result

- This reflects the properties of Active-80 Gold as a Wetter-Spreader-Activator.

Active 80 Gold

Test conducted on Onion crop by Institute of Pesticide formulation Technology



- Active 80 Gold leads to 8.33% reduction in Leaf blight disease over fungicides used alone.
- Active 80 Gold Leads to reduction in 11.33% reduction in disease over fungicides used alone.
- Active 80 gold increases crop yield by 47.73% over fungicides used alone.

Thank
you

Modicare Activzyme

(Seaweed Extract for Plants and crops)



COMING SOON
New 100ml pack



WHAT IS ACTIVZYME?

Activzyme is derived from a sea weed, *Ascophyllum nodosum* (a marine algae).

Marine Algae is an ideal organic store house of naturally occurring plant growth nutrients and other related compounds.

Why Activzyme ?

- Intensive cultivation
- Change in cropping pattern
- Chemical fertilizers
- Soil conditions
- ???????

Burning of Rice Stubbles

Burning of Wheat Stubbles

All such adverse factors
necessitates
the use of
ACTIVZYME



What Activzyme contains ?

Activzyme has six major components:

- Cytokinin
- Auxin
- Gibberellins
- Enzymes
- Betaines
- Hydrolysed protein complex

+

Natural advantages of sea weed:

- Organic in nature
- Over 60 minerals and elements
- 21 amino acids
- Simple and complex carbohydrates
- Essential plant growth nutrients & hormones
- Trace elements

CYTOKININS

- Promote cell division
- Regulate root growth
- Control biosynthesis of other hormones thus induce flower initiation, fruit setting and maturation of seeds.
- Retard senescence in aging leaf tissues.
- Helps in synthesizing enzymes & structural proteins.

AUXINS

- Promote cell elongation.
- Increase chlorophyll content and stimulate photosynthesis and respiration.
- Help in root initiation and development
- Control abscission.
- Delays aging of plant tissues.
- Ensures continues flow of carbohydrate for developing fruit and wood formation.

GIBBERELLINS

- Stimulate cell division
- Larger root system

ENZYMES

- Activate and catalyze biochemical reactions of a cell.
- Help in break down of complex molecules into simpler ones which can easily be utilized by the plant.
- Enhances the plant metabolic activities.
- Improves uptake of complex molecules from soil.
- Improves soil microbial activity.
- Induces faster and vigorous development of root mass.
- Improves uptake of previously unavailable nutrients and water from soil.
- Deep root growth also ensure that plants are able to cope with environmental stress.

BETAINES

- Reduces the intensity of oxidation reactions that damages cell structure.
- Limits the stress on the plant, enhances crop growth and improves overall health of the plant.

HYDROLYSED PROTEIN COMPLEXES

- Contains peptides and free amino acids and help in cell growth.

How is Activzyme taken up by plants?

- When applied Activzyme is absorbed in the vascular system of plants through stomatal openings besides the lenticels and cuticular fissures.
- It has the ability to bypass the physiological barriers and thus enters the plants.

Benefits & Advantages of Activzyme

- Natural , organic and non chemical product
- Non-toxic, eco-friendly, residue free and safe to use.
- Vigorous seedling growth.
- Healthy and well developed root system.
- Increased soil microbial activity.
- Better absorption and translocation of nutrients.
- Gives essential nutritional support, activates the plant physiological and metabolic activities.

Benefits of Activzyme

- Improve plants natural self defense system, which results in healthier crop with low pest pressure.
- Tolerance to stress conditions.
- Profuse branching/tillering and increased foliage,
- Profuse flowering and fruiting.
- Better development of grains/fruits (in size & weight)
- Better shelf life of produce.
- Reduced flower & fruit drop.
- Compatible with other products.
- Improves yield and quality.

IMPROVED PROFITABILITY

Foliar Application

Spray with any high volume sprayer, such as, knapsack sprayer till the Leaves are drenched completely.

For maximum advantage use at all critical phases of plant growth (early crop stage like seedling/immediately after transplant, pre-reproductive stage or flowering stage/peak flowering/fruit setting and fruit development stage)

Dosage

- Diluted at the rate of 1 ml in 1 litre of water .
- Generally applied at the rate of 200ml per acre.
- Shake bottle thoroughly before using
- Spray during cool hours in the morning or evening

Activzyme is compatible withr most of the commonly used fertilizers, insecticides, acaricides ,fungicides , adjuvants/ surfactants except which are of highly alkaline nature. However, it should not be applied with growth retardants and herbicides.

Where Activzyme can be used

Field Crops :

Paddy, Wheat, Jowar, Bajra, Cotton, Cumin, Opium, Jute, Sugarcane, Maize etc.

Pulses :

Red gram, Green Gram, Black gram, Horse gram, Bengal gram, Chick pea, Cow pea, Soyabean etc.

Vegetables :

Chilies, Beans, Brinjal, Okra, Onion, Pea, Potato, Sweet potato, Tomato, Cabbage, Cauliflower, spinach, Carrot, Reddish etc.

Plantations :

Arcanut, Coconut, Coffee, Rubber, Tea, Mulberry , Cocoa etc.

Horticultural Crops :

Apple, Banana, Citrus, Guava, Mango, Peach, Apricot, Ber, Grapes, Cashew, Melons, Papaya, Plum, Pomegranate etc

Oil Seeds:

Ground Nut, Castor, Linseed, Mustard, Safflower, Seasamum, Sunflower.
Spices, Black pepper, Cardamom, Coriander, Cumin, Garlic, Ginger, Tobacco, Turmeric etc.

Others: Lawns, Gardens, Golf course, Green house, floriculture, fodder crops etc.

Caution

- Not to be applied with products that are of highly alkaline nature.
- Not to be applied with growth retardants and herbicides.
- Store at room temperature and avoid exposure to direct sun light.
- Keep the bottle tightly closed when not in use.
- Keep out of reach of children.

Crop	Number of sprays and stage/interval of application
Paddy	Two spray at vegetative & panicle initiation stage.
Wheat, Barley, Bajra & Jowar	One spray at 4-6 leaf stage.
Maize	One spray at 10-14 leaf stage.
Pulses	One spray at trifoliolate leaf stage
Mustard	One spray at 50 DAS
Groundnut	One spray at 40 DAS
Sunflower	One spray at 35-40 DAS
Cotton	2 sprays, at square formation and at 25 days after first spray.
Sugarcane	2 sprays, at 60 DAP and 90 DAP.

Crop	No. of sprays &stage/interval of application
Chilli & Tomato	3 sprays, at initiation of flowering and at 20 and 40 days after first spray.
Brinjal,Okra and Cucurbits	2 sprays, at 6-8 leaf stage and at the sign of fruit set.
Cabbage, Cauliflower, Turnip, Radish and Carrot.	2 sprays, at 6-8 leaf stage and at 15 - 20 days after first spray.
Soyabean, Pea, Cowpea, French bean and Cluster bean.	One Spray at 6-8 trifoliate leaf stage
Onion & Garlic	One spray at 25-40 DAS
Potato	One spray at 6-8 leaf stage
Ginger & Turmeric	2 sprays, at 45-50 DAS and at 21 days after first spray.

Crop	Number of sprays and stage/interval of application
Grapes (April pruning)	3 sprays, at 5 weeks after pruning and at 5 and 10 weeks after first spray.
Grapes (October pruning)	3 sprays, first spray before 1st GA application, second spray after fruit set and third spray at initiation of ripening.
Mango (Young trees up to 5 Years)	Spray once in 2 months.
Mango (bearing trees)	2 sprays, at first blossom and at fruit set stage.
Pomegranate	2 sprays, at fruit-set and 50% of fruit development.
Citrus	Spray once a month till harvest.
Apple	3 sprays, at green tip stage, at fruit-set stage and 4 weeks before harvest.
Plums and Peaches	One spray at early bloom stage

Crop	Number of sprays and stage/interval of application
Rose, Jasmine & Chrysanthemum	First spray at 30 days before bud formation and thereafter at 15 days interval till the end of flowering.
Tea	after pruning
Coffee	Coffee: during flowering
Tobacco	First spray 15 days after sowing and second spray can be given 20 days after transplanting

DAS: Days After Sowing
DAP: Days After Planting

Activzyme- Price Information

Product	Pack	MRP (RS.)	DP
Activzyme	500 ml	540	470



Merchandising Tips

- Try to speak in the language which the farmer understands.
- Ask them that do they want to increase their crop yield.
- Ask them that do they want to reduce their pesticide use.
- Ask them that do they want to save money.
- Tell them about Active-80, Active-80 Gold and Activzyme
- Tell them about its function.
- Tell them about the features and benefits
- Tell them about the cost per use.
- Demonstrate the qualities of the product to make them believe the product

- Tell them that the product is well tested.
- Show them the universities results.
- Avoid argument.
- Avoid over claiming the product.
- Be courteous and thankful to the farmer for his precious time.
- In the end always ask for his order.
- Ask him about the address and phone number of his other farmer friends.
- Leave your telephone number to them.
- Make regular calls and visits to the farmers.

Happy Selling Thank You

