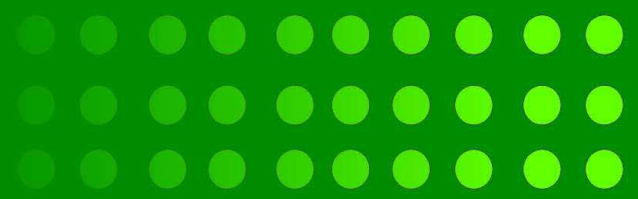




# FORTUNE AZA™

## 3% EC EPA No.71038-4



A Highly Effective Biopesticide isolated from Azadirachtin Technical neem kernel

**“To the best of my knowledge, no plant material with greater activity, or with activity against a broader spectrum of pest insect species, has been found.”**

**- Dr. Martin Jacobson USDA**

**Fortune Aza 3%EC is registered by US EPA(No.71038-4) and was granted patents in the USA(No.5,827,521) and other countries**

Dr.Jacobson was referring to neem or Azadirachtin Indica, a tree native to India. A botanical cousin of Mahogany, **NEEM** is heralded as a tree for solving global problems by the U.S. Department of Agriculture(USDA). **Azadirachtin** together with other constituents of neem seeds, such as salanin, nimbin, nimbidin and maliantriol exhibits **insect repellent, antifeedant and insect growth regulator** properties.

### Azadirachtin

**Azadirachtin** based pesticides are versatile, easily **bio degradable**, leaving no toxic residues and thereby keeping the environment clean and safe. **The US Environmental Protection Agency has exempted this product the requirement of a tolerance for residues, at a usage rate of 20gms a.i. per acre per application.**

It effectively controls about 400 insect species, mites, termites, soil nematodes and some fungi. It also has some **ectoparasiticial** properties as well.

Structurally Azadirachtin resembles the molting hormone ecdysone. Research has shown that the presence of azadirachtin in the insect body causes **hormonal imbalances** which result in unsuccessful molts(i.e., death), or heavily deformed immature stages and performs as an Insect Growth Regulator(IGR). Furthermore, in some adult insects it causes sterility and reduces egg laying in females. Azadirachtin has also been shown to slowly paralyze the mouth parts of many species of insects, which causes them to die slowly of starvation (**anti-feeding effect**).

Since Azadirachtin targets the molting process, it takes four to ten days to kill an insect, depending on the life cycle. However insects refrain from **feeding long before they die.**

Azadirachtin is not a contact insecticide and hence does not kill adults, instead provides effective control by repelling adults from feeding on treated crops.





# Fortune Aza

Fortune Aza's limonoid profile has proven to be superior in trials conducted in the USA. Selanin a powerful repellent and Nimbin, whose photo-degradation properties have been established as having IGR effect Fortune Aza provides a broad-spectrum pest control for fruits, vegetables and plantation crops, greenhouses, turf, outdoor ornamentals and agricultural crops such as sugarcane, paddy, cotton and tea..

**Fortune Aza 3%EC is an Ecofriendly Broad Spectrum Botanical Insecticide that is Organic Approved With IMO Control**



## Fortune Aza Salient Characteristics

- Multipronged effect.
- Interferes with growth and metamorphosis in insect larva.
- Acts as an oviposition deterrent.
- Blocks ovarian development in adult insects.
- Insect growth regulator by disrupting growth and molting hormone production .
- Repellant and Antifeedant
- No known resistance.
- No pest resurgence.
- Harmless to birds, mammals and beneficials such as bees, spiders and butterflies and insect natural enemies like predators and parasitoids.
- on par with traditional insecticides and superior in control to other biorational insecticides. An Integral part Integrated pest management strategy.
- Most cost effective than other biorational products
- Emulsifiable concentrate easily dispersed in water.
- Stable under room temperature conditions.
- Compatible with many synthetic pesticides and fungicides.
- Ideal for organic farming. Exhibits growth stimulant and phytotonic effects.
- Non Phytotoxic and no entry restrictions.

## Product Catalogue

1. Azadirachtin Technical
2. Azadirachtin EC- 0.03%, 0.1%, 0.15%, 0.3%,0.5%, 1%, 3%, 4.5%, 5%.
3. Neem Cake
4. Neem Oil
5. Water Soluble Neem Oil
6. Urea Coat
7. Neem Urea Coat.
8. Amino Acids- Granules & Liquid.
9. Bio Fertilizers, Bio Pesticides.
10. Bio Probatocs.

## Actions At Different Stages Of Life Cycle Of Insect

EGG STAGE	LARVA STAGE	PUPA STAGE	ADULT STAGE
Ovicidal Ovipositional deterrent, Toxicant, Egg Hatchability Growth Distruptant/Regular	Antifeed,Repllent, Growth Distruptant/Regular, Deterrent ,Molt Inhibitor Chitin Inhibitor, Larval Toxicant	Growth Disruption Molt Inhibitor, Growth Regulator Toxicant, Juvenile Hormone	Antifeedant, Repellent Deterrent Molt Sterility Molt/Chitin Inhibitor Growth Sexual Behavior Ovipositional Deterrent Juvenile Hormone Biosynthesis

## Application Recommendations

Fortune Aza 3% (30,000ppm)

2.5 to 7.5 gms a.i per acre (4000 Sq Mt) per application

1. For "Good" pest control and better results apply as soon as pests are observed. First application as soon as egg laying is observed followed by second on egg hatching. Further application at 7-15 day interval.
2. Apply during immature pest stages for greater control.
3. Apply in cool hours. Spray during morning or evening hours to maximize bio-efficacy.
4. Under high pest incidence, use product at short intervals.
5. Spray followed by a chemical application in case of serious pest outbreak in non-organic crops. Product may be applied in rotation or in combination with other pesticides as tank mix.
6. The formulation may be alternated with chemicals/biological if required.
7. Use the product to prevent insecticide resistance.
8. Thoroughly cover foliage or apply up to run off conditions.
9. Use "rain fastener" in case of high rainfall areas.
10. Avoid storage of spray mixtures. Mix afresh for every application - EC once diluted, to be used in 8 hours.
11. Use "pH" connectors depending on the spray water quality.
12. Use required "surfacetants" where necessary.
13. Good mixing required before application.
14. Use oil adjuvant to maximize biological activity of selected species.





## Fortune Aza: Benefits

1. Support Organic Crop Cultivation.
2. Help Provide IPM Solutions To Non-Organic Crops.
3. Help Prevent Or Delay Resistance In Pests.
4. Enhance Pesticide Activity.
5. Help Reduce Pesticide Use In Crops.
6. Help Manage Pesticide Residues In Food Crops.
7. Addition of a product to company catalogue.
8. Approved by the US EPA (An organization headed by the president of the United States) and IMO Control.



## Target Pests

Cauliflower, Celery, Cole crops (broccoli, cabbage, chinese vegetables etc.), lettuce, spinach.	Armyworms, cabbageworm, loopers, diamondback moths, flea beetles, leaf miners. Leaf Folders, Stem borers, Brown plant hoppers, Spodoptera, Whiteflies, Aphids.
Eggplants, peppers, tomatoes	Armyworms, hornworms, leaf miners, pepper weevils, Tomato fruit worms, tomato pinworms whiteflies.
Okra	Asphids, Jassids, Whiteflies, Borer.
Chilies	Mites, Thrips
Mushrooms	Mushroom flies, phorid flies and nematodes.
Potatoes	Aphides, Colorado potato beetles.
Herbs and spices	Aphids, armyworms, beetles, leafhoppers, leaf miners.
Gherkins	Leaf Miners, Whiteflies.
Strawberries, Blueberries, Cranberries & Raspberries	Aphids, Fireworms, flea beetles, maggots, tipworms
Grapes	Mealy Bugs, Flea Beetle, Leaf Hoppers, Grape Leaf Sketitonizers.
Apples, Cherries, Peaches, Pears	Aphids, Cherry maggots, leaf miners, leaf roller complex, pear psylla.
Mango	Hoppers, Leaf Webbers, Thrips, Eriophyid mites, Black Headed caterpillar, Red palm, weevil, mealy bug.
Cirtus and other fruit crops	Cutworms, Leaf miners, scales
Ornamentals	Aphids, whiteflies, fungus gnats, leaf miners, thrips.
Miscellaneous (alfalfa, artichokes, Cucurbits, lima beans and legumes, tobacco, tropical fruits, etc.)	Aphids, armyworms, artichoke plume moths, flea beetles, Hormones, Leaf Hoppers, Leaf miners, loopers pickleworms
Cotton Heliothis	Bollworms complex, Aphids, Whiteflies, Jassids, Spodoptera.
Sugarcane	Early shoot borer, Inter node borer, Whiteflies, Termite.
Tea	Mites, Tea mosquito bug, Caterpillar.

## RnD And Field Research

Fortune's Research Efforts are directed in two directions.

1. To produce cost effective Azadirachtin and improved emulsifiable concentrates.
2. To identify and introduce newer botanicals as herbal remedies.

A Highly qualified and dedicated team is working to achieve these objectives. Fortune's Biotech's Research Center has received recognition from the Dept. of Scientific and Industrial Research (DSIR), Govt. Of India.

Trials abroad and in India were insect specific and were conducted on the following insects:

Sweet Potato whitefly (Georgia, Ohio, California) leafminers (California, Florida) fungus gnats (Georgia) thrips (Utah) Aphids (California) Gypsy moth, Sawfly & Tent Caterpillars (Ohio), mushroom fly (Pennsylvania), army worms, thrips and mealy bugs (California), Colorado potato beetle (Idaho), Diamond Back Moth (California) and some more species.....

(For More Indepth Information of Field Research and Trials please visit our website : <http://www.fortunebiotech.com>) .

## Registrations Around The World

Fortune can be found in the following countries:

Organisation	Country	Brand Name
AMVAC Chemicals	U.S.A	Amazin, Orazin & Ecozin
SIPCAM spa.	Spain, Greece	OIKOS
Efal	Israel	Easydor
Landis Morgado	Mexico	Fortune Aza
Arabian Overseas	Middle East	Fortune Aza
Madras Fertilizers Ltd.	India	Vijay Neem
Excel	India	Azacel
Godrej	India	Achook
ITC	India	WellPro



For further details, visit our website [www.fortunebiotech.com](http://www.fortunebiotech.com) or Contact.

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