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| --- | --- | --- |
| **Products** | **Website link of Products** | **Product Literature** |
| Butachlor | <https://www.jaffer.com/jaspl/product/113/butachlor/> |  |
| Wuxi | <https://www.jaffer.com/jaspl/product/114/wuxi/> | <https://jaffergroup-my.sharepoint.com/personal/rija_nasir_jaffer_com/Documents/Working%20Details/JAM%20&%20Campaign/Campaign%20Executive/2023/Website/ZK/JBL%20Wuxi%20Flyer%2021-08-23.pdf> |
| Fuji One | <https://www.jaffer.com/jaspl/product/124/fuji-one/> | <https://jaffergroup-my.sharepoint.com/personal/rija_nasir_jaffer_com/Documents/Working%20Details/JAM%20&%20Campaign/Campaign%20Executive/2023/Website/ZK/JBL%20FujiOne%20Flyer%2021-08-23.pdf> |
| Monomehypo | <https://www.jaffer.com/jaspl/product/64/monomehypo/> |  |
| Cartap Hydrochloride | <https://www.jaffer.com/jaspl/product/61/cartap-hydrochloride/> |  |
| Champion | <https://www.jaffer.com/jaspl/product/13/champion/> |  |
| Greenopas | <https://www.jaffer.com/jaspl/product/131/greenopas/> |  |

**Butachlor**

**“Pre-Emergence Rice Herbicide”**

**Product Category:**Herbicide  
**Active Ingredient:** Butachlor  
**Formulation:** Available in EC Formulation (60 EC)

**Target Crop**: Rice

**Target Pests:** Annual grasses and certain broad-leaved weeds in Rice.

**Mode of Action:**

* Selective systemic herbicide, absorbed primarily by the germinating shoots and secondarily by the roots, with translocation throughout the plant.
* Inhibits cell division by blocking protein synthesis.
* Used as pre/early post emergence for the control of annual grasses and certain broad-leaved weeds in Rice.

**Recommendations:**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Pests** | **Dose** |
| Rice | Annual grasses and certain broad-leaved weeds in Rice | 800 ml / Acre |

**Method of Application:**

* Apply through Shaker bottle, within 5-7 days after transplanting.
* Water should stand 3 - 4 inches at time of application.
* There should be water stand in the field till 5 - 7 days after Butachlor application.

**Registration Details:** Product is registered in Pakistan under form-16.

**SKU:** Butachlor 60 EC is available in 800 ml pack.

**Wuxi**

**“Novel Post Emergence Rice Herbicide for Eradication of Ghora Ghass”**

**Product Category:**Herbicide  
**Active Ingredients:** Penoxsulam + Cyhalofop butyl  
**Formulation:** Available in OD Formulation (Oil Dispersion)

**Target Crop**: Rice

**Target Pests:**Ghora Ghass and other annual weeds in Rice Grasses, Sedges & BLW

**Mode of Action:**

* Unique and novel post-emergence selective herbicide that consists of two active ingredients: Penoxsulam & Cyhalofop.
* Both the active ingredients in Wuxi attack on weeds in two different ways and control them effectively.
* Have good systemic actions. Absorbed through leaves & roots of weeds and kill them completely.
* ALS inhibitor and AC Case inhibitor.
* One shot solution for effective control of important grasses, sedges and B.L. weeds in Rice.

**Key Properties / USPs:**

* Highly effective against difficult to control weeds in Rice specially Ghora Ghass, Swanki, Dhidhan, Moorak (Deela), Bulrush (Mota Deela) etc.
* Weed free crop…... healthy start for good harvest.
* Can be used in all types of rice cultivations i.e., Transplanted rice, Direct seeded rice as well as in Nursery.
* Excellent crop safety. Lush green healthy crop with increased yield.
* Good rain fastness – Remain effective even if rain comes after 2 hours of spray.

**Recommendations:**

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| --- | --- | --- |
| **Crop** | **Pests** | **Dose** |
| Rice | Annual Weeds in Rice (Grasses, Sedges & BLW) | 1 Ltr / Acre |

**Method of Application:**

* Use “Wuxi” as foliar spray only.
* Use herbicide nozzle for spray and ensure thorough coverage & uniform spray in the field.
* Spray should be done when most of the weeds have emerged and at 2 - 5 leaves stage.
* There shouldn’t be water standing in the field at the time of Wuxi application. Spray should be done under drained conditions (wattar / saturated conditions)
* Don’t irrigate the crop until 36 hours after spray. Afterward irrigate the crop and then keep water standing for 3-4 days.

**Registration Details:** Product is registered in Pakistan under form-17.

**SKU:** Wuxi 60 OD is available in 1 Liter pack.

**Fuji One**

**“A Unique and True Blasticide"**

**Product Category:** Fungicide

**Active Ingredient:** Isoprothiolane 40%EC

**Formulation:** Available in EC Formulation (Emulsifiable Concentrate) with 40% w/w concentration

**Target Crop:** Rice

**Target Pest:** Rice Blast

**Mode of Action:**

* Fuji One is a systemic fungicide.
* The mode of action is different from other conventional fungicides. It affects lipid metabolism and/or biosynthesis of fatty acid such as methylation of phospholipid.

**Key Properties / USPs:**

* **Curative & Long-lasting Actions**  
  Fuji-One controls the disease well and stop its further spreading, hence provide control for long duration.
* **Broad Actions**  
  Fuji-One affects every stage of infection cycle of rice blast. The penetration stage is most sensitive and hence the Main Target.
* **Successful against Leaf & Panicle Blast**  
  Fuji-one is successful against blast appearing at different crop stages like Leaf stage, Nodes/Neck stage as well as panicle or grain formation stage.
* **Systemic and long-lasting effect**  
  Fuji-one penetrates plant parts (leaves, branches) quickly after spray and immediately starts its work. Due to its high systemic activity, it shows long-lasting effect against blast.

**Recommendations:**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Pest** | **Dose** |
| Rice | Rice Blast | 480 ml / Acre |

**Application Timing & Method**:

* Start spraying at the appearance of 1st disease symptom OR when the environmental conditions are favorable for disease appearance, start spraying as preventive.
* Repeat the application at 10 - 15 days interval.
* Interval of sprays can be changed according to the intensity of the disease.
* Use as a foliar spray.
* Keep water volume high (@ 120 - 140 Ltr / Acre) while spraying and ensure thorough coverage of all plants.
* Use hollow cone nozzles for spray and ensure the thorough coverage of crop.

**Registration Details:** Product is registered in Pakistan under form-17.

**SKU:** Fuji One 40%EC is available in 480 ml pack.

**Monomehypo**

**“A Different Granule Insecticide, Showing Good Control of Borers”**

**Product Category:**Insecticide  
**Active Ingredient:**Monomehypo  
**Formulation:** Available in G Formulation (Granules) with 5% w/w concentration

**Target Crop:** Rice

**Target Pests:**Stem Borers, Leaf folder

**Mode of Action:**

* Systemic insecticide with contact & stomach action.
* It blocks nerve transmission as it binds receptors in the nervous system of insects.

**Key Properties / USPs:**

* Contact & Stomach action with good systemic activities.
* Can control borers of rice crop effectively.
* It has a long persistent efficacy.
* Suitable for IPM / IRM program.

**Recommendations:**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Pests** | **Dose** |
| Rice | Stem Borers, Leaf folder | 7 kg / Acre |

**Method of Application:**

Apply product as broadcasting in standing water when insect population reaches ETL.

**Registration Details:** Product is registered in Pakistan under form-16.

**SKU:** Monomehypo 5%G is available in a 7 kg pack.

**Cartap Hydrochloride**

**“Exceptionally Good Granule Insecticide, Showing Consistent & Most Efficient Control of Borers”**

**Product Category**: Insecticide  
**Active Ingredient:** Cartap Hydrochloride  
**Formulation:** Available in G Formulation (Granules) with 4% w/w concentration

**Target Crop:** Rice

**Target Pests:** Rice Stem Borers, Rice Leaf folder

**Mode of Action:**

* Strongly systemic insecticide with contact & stomach action.
* It blocks nerve transmission as it binds receptors in the nervous system of insects.

**Key Properties / USPs:**

* Contact & Stomach action with strong systemic activities.
* Effective against insects mining in plants by its systemic action.
* It can control insects' resistance to other insecticides.
* Quite safe for beneficial insects as it has almost no effect on natural enemies of insect pests.
* It has a long persistent efficacy.
* Suitable for IPM / IRM program.

**Recommendations:**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Pests** | **Dose** |
| Rice | Stem Borers, Leaf folder | 9 kg / Acre |

**Method of Application:**

Apply product as broadcasting in standing water when insect population reaches ETL.

**Registration Details:** Product is registered in Pakistan under form-16.

**SKU:** Cartap Hydrochloride 4%G is available in 9 kg pack.

**Champion**

**“Inimitable Fungicide with Broad Crop Usage and Reliable Disease Control”**

**Product Category:** Fungicide  
**Active Ingredient:** Copper Hydroxide  
**Formulation:**Available in WP Formulation (Wettable Powder) with 77% w/w concentration

**Target Crops:** Potato, Chilies, Vegetables, Orchards etc.

**Target Pests:** Lower & Higher Fungi including (early blight, anthracnose, powdery mildew etc.)

**Mode of Action:**

* The copper ions of “**Champion 77%WP**” linked to fatty acids or other organic molecules in plants. The spray solution is a suspension of copper particles, and those particles persist on plant surfaces after the spray dries.
* Copper ions are gradually released from these copper deposits each time the plant surface becomes wet. The gradual release of copper ions from the copper deposits provides residual protection against plant pathogens. At the same time, the slow release of copper ions from these relatively insoluble copper deposits reduces risks of phytotoxicity to plant tissues.
* Copper ions denature proteins, thereby destroying enzymes that are critical for cell functioning. Copper can kill pathogen cells on plant surfaces, but once a pathogen enters host tissue, it will no longer be susceptible to copper treatments. Thus, “**Champion 77%WP**” sprays act as protectant fungicide / bactericide treatments but lack post-infection activity.

**Key Properties / USPs:**

* One of the oldest and first elements used as plant fungicide.
* Strong contact action and has redistribution ability.
* Unique formulation with high solubility and strong stickiness.
* Excellent rain fastness.
* Provides protection against fungi as well as bacteria.
* Crop compatibility is excellent.

**Recommendations:**

|  |  |  |
| --- | --- | --- |
| **Crops** | **Pests** | **Dose** |
| Potato | Early & Late Blight | 1000 gm / Acre |
| Tomato | Early & Late Blight | 1000 gm / Acre |
| Chilies | Leaf Blight | 500 gm / Acre |
| Cucurbits | Downy Mildew | 500 gm / Acre |

**Application Timing & Method:**

* Start spraying at the appearance of 1st disease symptom OR when the environmental conditions are favorable for disease appearance, start spraying as preventive.
* Repeat the application at 10-14 days interval.
* Interval of sprays can be changed according to the intensity of disease.
* Take a small quantity of water in a container and dissolve the required quantity of Champion 77%WP in it. Stir this solution properly and mix it with the remaining quantity of water. The volume of total water required will depend on crop stage, crop cover, the total area to be treated and the type of sprayer used.
* Use hollow cone nozzles for spray and ensure the thorough coverage of crop.

**Registration Details:** Product is registered in Pakistan under form-1.

**SKU:** Champion 77%WP is available in 1 kg pack.

**Greenopas**

**“A Fungicide for Special Protection of Crops"**

**Product Category:** Fungicide

**Active Ingredients:** Epoxiconazole + Pyraclostrobin

**Formulation:** 17% SE (4.7% + 12.3%)

**Target Crop:** Banana

**Target Pest:** Leaf Spots

**Mode of Action:**

* A fungicide with two latest molecules having excellent functioning for protecting & curing the crop from diseases.
* Greenopas is a broad-spectrum fungicide with long-lasting efficacy against leaf spots and other diseases, especially on cereal crops.
* It also enhances the leaf osmotic conduction, and its unique chemistry actively stops the production of new fungi spores and has eradicative capabilities by encapsulating fungal haustoria, which is then cut off from its nutrient supply and therefore dies.

**Key Properties / USPs:**

* **Unique & Powerful Pre-Mix Fungicide**  
  Greenopas is a pre-mix fungicide having a combination of two latest molecules with globally recognized co-formulation.
* **Broad Spectrum Activity**  
  Greenopas works effectively at every stage of leaf disease like leaf spots and rust.
* **Preventive, Curative & Eradicant Activity**  
  Greenopas is a protective and systemic fungicide with curative properties. Can be used before and after the start of a disease.
* **Systemic & Translaminar Activity**  
  Greenopas is absorbed by the plant cuticle and underlying tissues so acts by killing spores and will protect new sprouts/leaves from the disease.
* **New & Stronger SE (Suspension - Emulsion) Formulation**  
  Provides long-lasting control against the disease.
* **Excellent Crop Compatibility**  
  Greenopas improves crop health, shine & vigor. Promotes chlorophyll production and assists crops to cope with challenging climatic conditions.

**Recommendations:**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Pest** | **Dose** |
| Banana | Leaf Spots | 150 - 225 ml / Acre |

**Application Timing & Method**:

* Start applying before the disease appears, when environmental conditions are favorable, OR on the appearance of the first disease symptoms.
* Keeping in view of the disease severity, two applications at 7 days intervals should be recommended.
* Use a hollow cone nozzle and keep water volume @ 100-120 L/A.
* Ensure thorough coverage of the crop, no plant or part of a plant should remain unsprayed.

**Registration Details:** Product is registered in Pakistan under form-17.

**SKU:** Greenopas 17% SE is available in 300 ml pack.