**Extensive production technology of maize**

**Introduction**

Maize is emerging as the third main food grain crop in the world after wheat and paddy. The main reason for this is its productivity - because its production capacity is up to 25-100 per cent higher than that of wheat and paddy.<  
Major producing districts/areas - Chhindwara, Betul, Seoni

**Utility**

**Maize in Madhya Pradesh:- -**

| Kr. | Year | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| 2002-2003 | | 2007-2008 | | 2012-2013 | |
| Area(Hey) | Productivity (kg/ha) | Area(Hey) | Productivity (kg/ha) | Area(Hey) | Productivity (kg/ha) |
| 1 | 664 000 | 962 | 834 600 | 1320 | 862000 | 2810 |

A pie chart with different colored circles

AI-generated content may be incorrect.

**Field preparation -**

|  |  |
| --- | --- |
| Selection of land and preparation of land - Balui Dumat soil in which well drained land is suitable for maize production.  Agricultural equipment used - plow, bakhhar, pata, dora, maize sowing and harvesting equipment. |  |

**Suitable varieties**

Agroclimatic zone- Precipitation: 800-1000 mm, temperature:11-18 D.From. (at night) & 30-32 D.From. (in day)

**Selection of varieties - Major notified hybrid varieties for Madhya Pradesh are as follows.**

| Kr. | Duration | Varieties | Issuing institution Name of |
| --- | --- | --- | --- |
| 1 | Quick ripening (duration less than 85 days) average production capacity 40 to 50 qui./hectors | D.H.M.-107 and 109 Yellow colored grain | N.G.Ranga Kri.V.V. Hyderabad |
| 2 | P.E.H.M.-1 & P.E.H.M.-2 Orange colored grain | Indian Council of Agricultural Research New Delhi |
| 3 | Light yellow color grain, p.M.H.-5 Orange grain | Punjab Agriculture Vs.V. Ludhiana |
| 4 | Pro.368 | Prof.Agro |
| 5 | X -3342 | Pioneer |
| 6 | D.K.C. - 7074 Yellow, orange grain | Monsanto |
| 7 | J.K.M.H. - 175 Yellow and orange Dana | J.K.Seeds |
| 8 | Bio - 9637 | Bio Seeds |
| 9 | K.H. - 5991 | Kanchenganga |
| 10 | Medium-term (95 days to 85 days) Average production capacity 50 to 70 qui./hectors | H.M.-4 Orange grain, H.M.-10 Yellow Dana, | Chaudhary Charan Singh Haryana Kr.V.V. Hisar |
| 11 | H.M.-10 Yellow mage, | Chaudhary Charan Singh Haryana Kr.V.V. Hisar |
| 12 | H.Q.P.M.-1 Yellow grain | Chaudhary Charan Singh Haryana Kr.V.V. Hisar |
| 13 | H.Q.P.M.-4 Yellow grain | Chaudhary Charan Singh Haryana Kr.V.V. Hisar |
| 14 | H.Q.P.M.-5 Orange grain | Chaudhary Charan Singh Haryana Kr.V.V. Hisar |
| 15 | P. - 3441 Orange grain | Pioneer Seeds |
| 16 | N.K.-21 Orange | Syngenta India |
| 17 | K.M.H. - 3426 orange | Kaveri Seeds |
| 18 | K.M.H. - 3712 yellow | Kaveri Seeds |
| 19 | M.N.H. - 803 yellow | Nuzividu Seeds |
| 20 | Bisco - 2418 yellow | Bisco Seeds |
| 21 | Bisco - 111 orange | Bisco Seeds |
|  | Delayed ripening (95 Over day) average production capacity 60 to 80 qui./hectors |  | |
| 22 | H.M. - 11 | Chaudhary Charan Singh Haryana Kr.V.V. Hisar |
| 23 | Deccan - 105 yellow | N.G.Ranga Kri.V.V. Hyderabad |
| 24 | Ganges - 11 Yellow | N.G.Ranga Kri.V.V. Hyderabad |
| 25 | Deccan - 103 Yellow | N.G.Ranga Kri.V.V. Hyderabad |
| 26 | Deccan - 101 Yellow | N.G.Ranga Kri.V.V. Hyderabad |
| 27 | H.Q.P.M. -4 Yellow | Chaudhary Charan Singh Haryana Kr.V.V. Hisar |
| 28 | Trisulata yellow, orange grain | N.G.Ranga Kri.V.V. Hyderabad |
| 29 | Bisco - 855 yellow, orange | Bisco Seeds |
| 30 | N.K. - 6240 frost, orange grain | Synjanta |
| 31 | S.M.H.-3904 Yellow | Shakti Seeds |
| 32 | Pro - 311 | Prof.Agro |
| 33 | Bio - 9681 | Bio Seeds |
| 34 | Seidtac - 740 | Seidtack |
| 35 | Seidtac - 2324 | Seidtack |

**Sowing management**

**(a) Suitable time for sowing:-**

|  |  |
| --- | --- |
| 15-30 June will be suitable for sowing in Kharif season and October month in Rabi season. While determining the time of sowing crop for Zayed, keep in mind that the temperature at the time of flowering is 35 cm.Grey. Do not exceed |  |

**(b) Distance from row to row and plant to plant -**

| Kr. | Description | From queue to queue distance.m. | From plant to plant distance.m. | Number of plants per hectare |
| --- | --- | --- | --- | --- |
| 1 | Early ripening | 60 | 20 | 80000 |
| 2 | Medium-term | 60 | 22 | 75000 |
| 3 | Late ripening Wally | 75 | 20 | 65000 |

**(c) Sowing depth - 3 to 5 cm**

**(d) Method of sowing - Sowing from row in ridge bed**

**Seed treatment**

* (a) Benefits of seed treatment - The germination capacity of seeds increases and there is protection from seed borne fungal diseases.
* (b) Name and quantity of fungicide - To prevent disease, treat Carbendazim at the rate of 1 gram and Thyram at 2 g/kg seed or Vitavex Power at the rate of 1 g/kg. Treat amidaclopreed 70 (WS) 5 g/kg seeds for pest management which will protect the plants for 30 days.
* (c) Method of using the medicine - First soak the seeds with a sticky substance and add the medicine, then dry in the shade and sow after 2 hours.

**Use of bio-fertilizer**

|  |  |
| --- | --- |
| * (a) Benefits of using bio-fertilizers - They work to provide nutrients to the plants. * (b) Use of biofertilizers - 3 K.Gra. P.S.V. And 3 K.Gra. Azotobacter about 100-150k.Gra.Mixing cow dung manure and spraying it before sowing gives good results. |  |

**Nutrient Management**

* (a) Quantity and use of cow dung manure/compost - normally 6 to 8 tonnes per ha. Compost or earthworm manure should be used at the rate of Rs. 1000 before sowing.
* (b) Balanced fertilizer can be given by predicting the benefits and nutrients of soil testing.
* (c) Time to administer balanced fertilizers -

| **Duration To ripen According** | **Nutrient Element (Ki./Hey.)** | | | **Options - 1** | | | **Option - 2** | | | **Option - 3** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Fertilizers (that./Hey.) | | | Fertilizers (that./Hey.) | | | Fertilizers (that./Hey.) | | |
| Natarajan | Spurr | Potash | Urea | Super phosphate | Murate of Potash | Urea | Super phosphate | Murate of Potash | Urea | Super phosphate | Murate of Potash |
| Quick | 90 | 40 | 30 | 200 | 250 | 50 | 161 | 87 | 50 | 163 | 125 | 17 |
| Moderate | 120 | 50 | 30 | 270 | 312 | 50 | 217 | 109 | 50 | 219 | 156 | 50 |
| Delay | 180 | 60 | 40 | 400 | 375 | 50 | 340 | 130 | 66 | 342 | 188 | 66 |

It would be more advantageous to give the amount of chemical fertilizers based on the soil test result. While sowing, give one-third quantity of nitrogen and the entire quantity of sphur and potash in rows.In the remaining two thirds, one third of the nitrogen should be given on 25-30 days and one third on 45-50 days in the standing crop.In case of filling of water in the field and delay in weeding, give the nitrogen at the rate of 20 kg per hectare with certainty.Use nitrogen in standing crops only after condemnation.

* (d) Caution in using balanced fertilizers:- Give balanced fertilizer on time in proper manner and do not use too much fertilizer.
* (e) Utility, quantity and method of use of micro elements: - 25 kg/hectare gink sulphate should be given through sprinkler method before sowing.

**Sleep management**

Maize crop should be sleepless at the initial stage otherwise production decreases. In maize crop, use atrazine 1 kg per hectare after sowing but before growing. Pendymethiline 1.5 K in intercalary (maize/pulses/oilseeds) cropping systems.Gra. Use sleep cakes per hectare immediately after sowing but before germination. 1.0 K of 2,4-D on day 30-35 if there is an excess of broad leafy weeds in maize crop.Gra. Weeds grown per hectare can be controlled by spraying

**Disease management**

| **Kr.** | **Name of the disease** | **Symptoms** | **Recommended medicine for control** | **Trading volume of medicine/ha.** | **Time and method of use** |
| --- | --- | --- | --- | --- | --- |
| 1. | Foliar ringworm | Small circles/elliptical brown brown spots are formed. | Zinem/mineb | 2.5 - 4g./Lee. | At 8 - 10 day intervals |
|  | | |  | | |
| 2 | Brown spot | Leaves: On the outer peel of the stem and cob, spherical/egg spots of light yellow color 1.5 millimeters in diameter are formed. | DITHEN M 45 | 2 - 2.5g./Lee. | At the onset of the disease |
|  | | |  | | |
| 3 | Mriduromil Asita (Downy Mildew) | Initially the yellow stripes, 3 ml meters wide perpendicular to the lower leaves, are formed in parallel. Later these stripes turn brown. | Apron 35 W. S. (Fungicide) | 2.5g./kg seed | Seed treatment |
|  | | |  | | |

**Pest management**

| **Kr.** | **Ketkanam** | **Symptoms** | **Drug recommended for control** | **Drug traded volume/ha.** | **Time and method of use** |
| --- | --- | --- | --- | --- | --- |
| 1 | Stem borer fly | Due to its outbreak, the plant becomes a dead heart and becomes a dead heart. | Forret10G | 10kg/ha. | BonnyEast |
|  | | |  |  |  |
| 2 | Stempore insect | The caterpillar eats the first leaf, thereby creating a dead heart. | Carbofuran3G | 10kg/ha. | In the 15-day period, the plant's ponglimendale. |
|  |  | The time when the steel peels and eats the stones. | Chloropyrifas 20 AD.C. | 2 ml/l |  |
|  | |  | |  | |

**उर्वरक प्रबंधन**

* उर्वरकों का उपयोग मक्का की किस्मों पर निर्भर रहता है।
* संकर जातियों के लिए उर्वरकों की अनुमोदित मात्रा 120 कि.ग्रा/हे नत्रजन,50 कि.ग्रा. फास्फोरस और 40 कि.ग्रा. पोटॉश है।
* संकुलित जातियों के लिए उर्वरकों की अनुमोदित मात्रा 100 कि.ग्रा/हे नत्रजन,40 कि.ग्रा. फास्फोरस और 30 कि.ग्रा. पोटॉश है।
* देशी जातियों के लिए उर्वरकों की अनुमोदित मात्रा 60 कि.ग्रा/हे नत्रजन,30 कि.ग्रा. फास्फोरस और 20 कि.ग्रा. पोटॉश है।
* नत्रजन का उपयोग तीन हिस्से में करें।
* एक तिहाई नत्रजन की मात्रा बोनी के समय डाले।
* एक तिहाई नत्रजन की मात्रा घुटने की ऊँचाई होने पर डाले।
* एक तिहाई नत्रजन की मात्रा भुट्टा निकलते समय डाले।
* यदि मिट्टी में जिंक की कमी हो तो 15 से 20 कि.ग्रा. जिंक सल्फेट डालें।

**Kharif crop - maize**

**Pest Management - Maize**

|  |  |  |
| --- | --- | --- |
| Insect | Colamba Livia |  |
| Popular name | Blue Cock Pigeon Parakeet Crow |  |
| Damage | * The biggest harm would be caused by birds eating grains Is. * The sown grains are eaten by birds. * The grains get damaged even while ripening. * New and soft branches also get damaged. |
| I.P. M | * Plant the crop quickly. * Destroy bird nests in and around the fields. * To scare the birds, keep effigies in the field. * Burst crackers. * Cultivate sunflowers. |
| Control | * Chemical pesticides should be used when birds The numbers should cross the economic threshold level. * Covering the cobs with clothes also reduces the attack of birds can be done. * By playing empty utensils and also by beating drums Bird attack can be reduced. * Bird attacks can also be reduced by bursting firecrackers Is. * Birds also move away by using reflectors. |
|  | | |
| Insect | Rhopalosiphum mydis |  |
| Popular name | Mahu |
| Damage | * Green black colored aphids live in groups. * The attack of this insect is more during flowering and it is soft Sucking the juice of parts causes harm. * By sucking the juice the leaves turn yellow and pollen also falls Is. |
| I.P. M | * Do not let water shortage occur. * Inspect the field from time to time. * Take control measures in the initial stage. |
| Control | * Methyl dimeton 25 E.C. Or dimethoate 30 E.C. 1 min of.Lee. Make a solution per liter of water and spray it. * Chemical pesticides should be used when insects The number should cross the economic threshold level. * By spraying monocrotophos in the early stages Get benefits. |
|  | | |
|  | | |
| Insect | Chilo Paratulus |  |
| Popular name | Striped stem borer insect |
| Damage | * The caterpillars are light green with yellow black heads Brown stripes are found lengthwise on the body. * The full-grown caterpillar is 2.5 cm long. * The caterpillars eat the leaves by scraping them first and then It makes a hole in it in such a way that if the leaf is seen Looks like holes made with a needle. * Later, it pierces the stem and enters inside and eats it Becomes a dead center. * Outbreaks of this pest have been estimated to cause up to 80 percent loss. |
| I.P. M | * Ganges 4, Ganges 5, Ganges White 2 There are resistant varieties of North India. * D.H.M. 101 is the resistive varieties of South India. * Destroy crop residues and deep plowing during summer Do it. * Pre-crop residues, weeds and other nutritious plants of insects Uproot it and destroy it. |
| Control | * Chemical pesticides should be used when insects The numbers should cross the economic threshold level. * Economic sill level of stem borer insect affected by 10 percent There are plants. * Forret 10 G. Or carbafuran or thiodan 7-8 K.Gra. /Put it in the pongdi of plants at the rate of हे. * Metasystax 25 E to control the pest.C. Or Rogar 35 AD.500 min of C.Lee. 250 litres of water per hectare Spray at the rate of. * Carbafuran 35 S.T. 10 g/k.Gra. Seed rate Treat seeds with. |
|  | | |
| Insect | Cecemia Inference |  |
| Popular name | Pink stem borer |
| Damage | * The caterpillars of this insect are light pink with reddish brown tips It happens. * These are about 2.5-3 cm lagbi. * After coming out of the egg, make a hole in the caterpillar Entering the stem and eating it, as a result the plant turns yellow Let's go. And the leaves in the middle would dry up and become a dead centre Is. |
| I.P. M | * Ganga 4, Ganga 5, Ganga white 2 Resistive varieties of North India Is. * D.H.M. 101 is the resistive varieties of South India. * Destroy crop residues and deep plowing during summer Do it. * Pre-crop residues, weeds and other nutritious plants of insects Uproot and destroy. |
| Control | * Chemical pesticides should be used when the number of insects Cross the economic threshold level. * Economic sill level of stem borer moth 1 larva per plant It happens. * Metasystax 25 E to control the pest.C. Or Rogar 35 AD.500 min of C.Lee. 600 litres of water per hectare Spray at the rate of. * Carbafuran 3 G. 10 K.Pengri as per g/ha Put in. * Carbafuran 35 S.T. 10 g/k.Gra. Seed rate Treat seeds with. |
|  | | |
| Insect | Palucia acuta |  |
| Popular name | Palucia |
| Damage | * The leaves turn yellow and later fall off. |
| I.P. M | * Do not let water shortage occur. * Inspect the field from time to time. * Take control measures in the initial stage. |
| Control | * Decis 2.8 E.C. Per hectare with 500-600 litres of water Spray. |
|  | | |
| Insect | Maracinia trapezellis |  |
| Popular name | Leaf bend caterpillar |
| Damage | - |
| I.P. M | * Maintain cleanliness in the field. * Adopt crop rotation. * Use well rotten insect free manure. |
| Control | * Metasystax 25 E to control the pest.C. Or Rogar 35 E.500 min of C.Lee. 600 litres of water per hectare of Spray. * Carbafuran 3 G. 10 K.Pengri as per g/ha Put in. * Carbafuran 35 S.T. 10 g/k.Gra. Seed rate Treat seeds with. |
|  | | |
| Insect | Stem fly |  |
| Popular name | Stem fly |
| Damage | * The attack of this insect starts after Akunran and one Visible by month. * Its mangat, caterpillar enters the stem and the plant The middle part dries up which is called the dead body. |
| I.P. M | * Sowing should be done by the first week of July. * Keep a high seed rate and rarefy later. |
| Control | * 100 grams 50 W.P. Carbafuran per ki.Gra. Of seeds Treat seeds at a rate. * 10 G under seed at sowing. 10 K of Forret.Gr/hey Use. |
|  | | |
| Insect | Holotrycia sp. |  |
| Popular name | White braid |
| Damage | * These insects harm the roots of plants. * From 5 to 10 in wet soil.m. And in dry soil 30 From 60 to.m. Are found till. * Insect affected plants dry up, wither and crumble easily Let's go. |
| I.P. M | * Do deep plowing. * Use well rotten manure. |
| Control | * 10 G. Forret 10 K.Gra.Use before sowing at the rate of /hey. |

**Kharif crop - maize**

**Disease Management - Maize**

|  |  |  |
| --- | --- | --- |
| Disease | Charcoal rot |  |
| Hindi name | Charcoal Rott |  |
| Causative bacteria | Rhizoctonia bataticola |
| Control | 1. Of disease by treating seeds with 3 grams of carbandazim or thairam Can be controlled effectively |
| Symptoms & Damage | 1. Sprouted plants or plants that attain maturity often Are suffering from disease. 2. The seeds turn dark brown to black. 3. Plants germinating in the highpocotyle area turn reddish brown Let's go. 4. The infection spreads to the lower part of the stem where gray Stripes form on the stem surface, causing premature ripening and shedding And it breaks. 5. In case of drought, the germinated plants dry up and the plant dies Goes. |
| I.P. M | 1. Growing resistant varieties such as D H M 103,105 Ganga Safed 2 Need. 2. Clean the fields regularly. 3. Adopt crop rotation. 4. Disease caused by keeping adequate amount of water at the time of flowering Attack can be reduced. 5. Do not keep the seed rate too high. 6. Fertilizers and nutrients to promote plant growth Use. 7. Irrigation or field to maintain moisture in the soil Water the field 3-4 weeks before sowing in. |
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|  | | |
|  | | |
| Disease | Maze Leaf Blight |  |
| Hindi name | Dachislera leaf scorching |
| Causative bacteria | Dechislera victorieae (Cockalibolus victorieae) |
| Symptoms & Damage | 1. Small diamond shaped spots appear on the leaves and of time Grow together. 2. Due to the adjacent veins, the growth of spots stops They become rectangular. 3. They are reddish brown in color and have deep brown edges It happens. |
| Control | 1. Use 2.5 g/l Menkojeb. |
| I.P. M | 1. Destroy weeds and crop residues. 2. Plow deep in summer. 3. Use resistant hybrid varieties. 4. Adopt crop rotation so that continuous attack of disease can be stopped. |
|  | | |
|  | | |
| Disease | Toursicum Leaf Spot |  |
| Hindi name | Toursicum leaf scorching |
| Causative bacteria | Dachislera toursica(Trichometasphyria toursica) |
| Symptoms & Damage | 1. In this disease, brown spots are found in length on the leaves. 2. The initial symptoms of this disease appear on the lower leaves Which are also found on the upper leaves later in moist weather. |
| Control | 1. Spray 2.5 g/l of mencozeb. |
| I.P. M | 1. Grow resistant hybrids. 2. Adopt crop rotation. 3. Maintain cleanliness in the field. |
|  | | |
|  | | |
| Disease | Downey Mildew |  |
| Hindi name | Mriduromil Asita |  |
| Causative bacteria | Parnosclyrospora sorgii |
| Symptoms & Damage | 1. The disease spreads through seeds and soil. 2. First of all the upper leaves turn. 3. Tall on lower leaves and 3 min.m. Stripes are formed. Later white colored fungus is visible. 4. More outbreaks reduce yield by 20 to 60 percent Goes. |
| Control | 1. 4 g/k.Seed by metlexile at the rate of gram seed Treat. 2. Spray 2.5 g/l Menkojeb. |
| I.P. M | 1. Destroy crop residues before field preparation in summer. 2. Grow resistant hybrids. 3. Destroy host plants. 4. Do deep plowing. |
|  | | |
|  | | |
| Disease | Sorgam Downey Mildew |  |
| Hindi name | Mriduromil Asita |  |
| Causative bacteria | Parnosclyrospora sorgii |
| Symptoms & Damage | 1. The leaves of plants affected by the disease are light yellow And subtle soft growth is visible on them. 2. Plants become weak and after 5-6 weeks on leaves White stripes are visible. |
| Control | 1. 4 g/k.Seed by metlexile at the rate of gram seed Treat. 2. Spray 2.5 g/l Menkojeb. |
| I.P. M | 1. Destroy crop residues before field preparation in summer. 2. Grow resistant hybrids. 3. Destroy host plants. 4. Do deep plowing. |
|  | | |
|  | | |
| Disease | Brown Stripe Downy Mildew |  |
| Hindi name | Mriduromil |  |
| Causative bacteria |  |
| Symptoms & Damage | 1. The spots become red bengni and increase in size. 2. The spots form small green stripes on the leaves Increases to the veins. 3. Leaves do not fall but affected plants before flowering Die. Control 1. 4 g/k.By metlexile at the rate of gram seed Treat the seeds. |
| Control | 1. 4 g/k.Seed by metlexile at the rate of gram seed Treat. 2. Spray 2.5 g/l Menkojeb. |
| I.P. M | 1. Destroy crop residues before field preparation in summer. 2. Grow resistant hybrids. 3. Destroy host plants. 4. Do deep plowing. |
|  | | |
|  | | |
| Disease | Sugarcane Downy Mildew |  |
| Hindi name | Mriduromil |  |
| Causative bacteria | Parnosclyrospora sorgii |
| Symptoms & Damage | 1. The spots in the beginning are small round and green. 2. Yellow to white stripes are visible on the old leaves. |
| Control | 1. 4 g/k.Seed by metlexile at the rate of gram seed Treat. 2. Spray 2.5 g/l Menkojeb. |
| I.P. M | 1. Destroy crop residues before field preparation in summer. 2. Grow resistant hybrids. 3. Destroy host plants. 4. Do deep plowing. |
|  | | |
|  | | |
| Disease | Common Rustu |  |
| Hindi name | Ochreous disease |  |
| Causative bacteria | Pucinia Medis |
| Symptoms & Damage | 1. In the disease, chalky colored protrusions are visible on the leaves When touched, a chalky colored powder sticks to the hand. 2. The leaves later turn yellow and fall. 3. In this disease, chalky colored leaves emerge on the leaves When you touch them, they appear to be of chalky color on the hand The powder sticks. 4. The leaves later turn yellow and fall. |
| Control | 1. 4 g/k.Seed by metlexile at the rate of gram seed Treat. 2. Spray 2.5 g/l Menkojeb. |
| I.P. M | 1. Destroy crop residues before field preparation in summer. 2. Grow resistant hybrids. 3. Destroy host plants. 4. Do deep plowing. |
|  | | |
|  | | |
| Disease | Brown spot |  |
| Hindi name | Brown spot |  |
| Causative bacteria | - |
| Symptoms & Damage | 1. Round elliptic small and greyish brown spots on leaves and foliage Which later turn dark brown and come together to form big spots In which the leaves get burnt and sometimes the plants dry up Taxes die. |
| Control | 1. There is no special control approved for brown spot. |
| I.P. M | 1. Destroy crop residues before field preparation in summer. 2. Grow resistant hybrids. 3. Destroy host plants. 4. Do deep plowing. 5. Adopt crop rotation. |
|  | | |
|  | | |
| Disease | Bened leaf and sheath blight |  |
| Hindi name | Striped foliage and scabies |  |
| Causative bacteria | Rhizatonia solani |
| Symptoms & Damage | 1. Large colorless areas and alternate stripes are visible on the leaves Is. 2. If more infection occurs, rashes appear on the petioles and leaves Is. 3. Symptoms range from fibers, straw and seeds in favorable conditions Reaches. 4. Symptoms also appear on the stubble and from the infected area Break down. |
| Control | 1. Of carbandazim or propiconazole at a rate of 1.5 g/l Spray. |
| I.P. M | 1. Maintain cleanliness in the field. 2. Destroy crop residues. |
|  | | |
|  | | |
| Disease | Seedling blight, root and stock rot |  |
| Hindi name | Seed and plant melting |  |
| Causative bacteria | - |
| Symptoms & Damage | 1. Watery spots are visible on small roots. 2. The rot spreads to the main roots and to the top tentacles. 3. The disease occurs only on low lumps adjacent to the soil. 4. Brown elliptical spots appear on infected nodes And the plant turns and breaks. |
| Control | 1. Watery spots are visible on small roots. 2. The rot spreads to the main roots and to the top tentacles. 3. The disease occurs only on low lumps adjacent to the soil. 4. Brown elliptical spots appear on infected nodes And the plant turns and breaks. |
| I.P. M | 1. Maintain cleanliness in the field. 2. Arrange drainage. |
|  | | |
|  | | |
| Disease | Head smut off table |  |
| Hindi name | Kandava disease |  |
| Causative bacteria | Ostelego Medis |
| Symptoms & Damage | 1. This disease is seed borne. 2. In this disease the entire inflorescence turns into a spore Is. 3. In the later stage the spores become exposed. 4. A web of black fiber sticks to the cob. |
| Control | 1. 3 grams of kepton or thairam per ki.Gra. Seeds at seed rate Treat. |
| I.P. M | 1. Adopt crop rotation. 2. Sow certified and healthy seeds. 3. Maintain cleanliness in the field. |
|  | | |
|  | | |
| Disease | Blake Bundle |  |
| Hindi name | - |  |
| Causative bacteria | - |
| Symptoms & Damage | 1. The leaves and stings become bengani in colour. 2. The wescholar bundles of the plant turn black. 3. The causes of this disease remain in the soil for a long time and if There would be shortage of water in the soil later or at the stage of flowering Then the possibility of this disease increases. |
| Control | 1. 3 grams of kepton or thairam per ki.Gra. Seeds at seed rate Treat. |
| I.P. M | 1. D.H.M. 103, D.H.M. 105 and Ganges white-like resistors Sow varieties. 2. Adopt crop rotation. 3. Clean the field regularly. |
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| Disease | Common smut |  |
| Hindi name | Kandava disease |  |
| Causative bacteria |  |
| Symptoms & Damage | 1. Disease in the top parts of the maize plant, especially in new plants The possibility of infection is high. |
| Control | 1. 3 grams of kepton or thairam per ki.Gra. Seeds at seed rate Treat. |
| I.P. M | 1. Adopt crop rotation. 2. Sow certified and healthy seeds. 3. Maintain cleanliness in the field. |
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| Disease | Mainz Dough Mosaic Virus |  |
| Hindi name | M.D.M.V. |  |
| Causative bacteria | Mosaic virus |
| Symptoms & Damage | 1. New leaves are sensitive to the attack of this disease. 2. Light irregular or dark green spots appear on the leaves. 3. Affects plant growth and multiple hairs and many more Less grains are filled. |
| Control | 1. 1.5 min.Li monocrotophos or 2 min.Lee. Dimethoate per liter Control insect viruses at a rate. |
| I.P. M | 1. Destroy Johnson grass because it is a host plant. 2. Clean the field from time to time. |
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| Disease | Mainz mosaic virus |  |
| Hindi name | Viral disease |  |
| Causative bacteria | M.M.V. |
| Symptoms & Damage | 1. This is a disease occurring mostly in maize. 2. Colorless spots are formed in the beginning, then small spots Lines emerge. 3. If infection persists, entire leaves are affected And dies upon further attack. 4. New growth occurs in the form of flakes. ¡ ¡ ¡ ¡ ¡ |
| Control | 1. 1.5 min.Li monocrotophos or 2 min.Lee. Dimethoate per liter Control insect viruses at a rate. |
| I.P. M | 1. Sow on time. 2. Maintain cleanliness in the field. 3. Destroy host plants. |
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| Disease | Seedling Blight |  |
| Hindi name |  |  |
| Causative bacteria | Rhizotonia solani |
| Symptoms & Damage | 1. High temperature and humid environment for the spread of this disease Is favourable. 2. This disease is seen in new plants. As a result of which Seedling starts drying up and Akunran remains good. 3. The old roots and top tents become clustered. 4. This disease spreads more in lumps touching the soil. 5. Fungus starts growing in the affected area and this often causes the plant to grow Breaks. 6. The fungus lives in soil and plant remains. |
| Control | 1. Treat seeds with 3 percent thyrum or keton. |
| I.P. M | 1. Ganga White 2 and D.H.M. To resistive varieties such as 103 Grown in sensitive areas. 2. Adopt crop rotation. 3. Clean the field regularly. 4. Make good drainage arrangements. |