

Cultivation of Maize **(*Zea mays* L.)**



KVK Dimapur
ICAR RESEARCH COMPLEX FOR NEH REGION
NAGALAND CENTRE
JHARNAPANI, MEDZIPHEMA
NAGALAND

Mokai tu manu karne ekta beshi important crop ase. Mokai tu manu khabloe, janwar khabole aru industry te bhi cholai. Mokai tu alak alak hawapani te zinda thakebo pare. Mokai tu tai laga genetic yield potential karne "Queen of cereals" bhi koi.

HYBRIDS/COMPOSITES

QPM Hybrids: Vivek QPM 1, HQPM-1,

Normal Hybrids: Vivek Maize Hybrid 25, Vivek Maize Hybrid 39, Vivek Maize Hybrid 43, Ganga hybrid-1, Ganga hybrid-101, Ganga safed-2, Deccan hybrid

Composites: Vijay composite, Vivek Sankiul Makka 35, RCM-75, RCM-76

Baby Corn: VL Babycorn 1(composite), HM 4 (Hybrid)

Fodder purpose: African Tall, J-1006, Jawahar, Sona

HAWA PANI LAGIA

Mokai karne tu ulob gorom climate hi lage. India te makoi to sea level para lokina 3000m takte aur salbharlagabo pare. Mokai tu germinate hobo karne 21° C lage aru tai dangor hobole 32° C lage. Mokai bhal hobo karne borkon tu 50 to 75 cm tak lage.

SOIL REQUIREMENTS

Mokai tu loamy sand para clay loam mati te lagabo pare. Mol beshi thakia aru pani jama nohoa mati te mokai lagabo karne bhal ase. Beshi bheeja thakile to mokai tu biya hoi jai itu karne olub sukha jaga hi lage aru pH to 5.5 baro 7.5 hobo lage.



FIELD PREPARATION

Mati first kundia time te mati tu khundi kena ulta kuridibo lage aru mati tu 20 – 25 cm deep tak norom kuribo lage. Itu peeche te aru 2 – 4 times tak mati tu bhal para kundi kena mehin koribo lage.

SEED AND SOWING

1. Kiman bejon lagibo aru kiman durte lagabo: Kiman bejon lagibo aru kiman durte lagabo itu to kauntu season te lagabo, kauntu jat lagabo, bejon laga size aru weight, bejon dahlia laga niyum heesab te hi hobo lage. Borkhon pani hi debo aru janwar karne he ase koile line para nalagaile bhi hobo, hoilebhi doosarakam karne tu line te hi lagabo lage.

(i) **kiman durte lagabo:** 60 - 75 cm X 18 - 20 cm

(ii) **Kiman bejon lagebo:** Hybrids/Composites – 18-22 kg/ha, fodder – 40-50 kg/ha

2. Time of sowing

(i) **Kharif sowing:** Bejon tu borkhon nagiria agete lagabo lage i.e March laga first hapta te, kileman beshi pani na aha agete bejon tu germinate hoikina puli (chootu mokai ghas) tu bahal para uthikina thakibo lage.

(ii) **Rabi crop:** Itu season te bejon lagabole thik time tu October khotum hobole time para November mohina laga majot tak ase hoilebi pani debole para jaga hobo lage.

(iii) **Spring sowing:** Itu season te bejon lagabole thik time tu January mohina laga last hapta para February mohina laga last hapta tak ase hoilebi pani debole para jaga hobolage.

MOL DIYA LAGA NIYUM

Mokai tu mol (organic/inorganic) thakia jagate beshi bhal hoi aru mol thakia aru nathakia tu thik jani kina dibo lage. Mokai bhal hobo karne Nitrogen supply tu tai dangor hoi thaka time hodai halibo lage.

Nitrogen: 120 – 150 kg N/ha (3 bhag kurikina)

Phosphorus: 40-60 kg P_2O_5 / ha

Potash: 30-40 kg K_2O / ha

Itu inorganic mol khan tu organic mol logote melai kina debole. Bijon nalaga 20 din agete sukha goru laga paikhana @ 8-10 tones/ha dibolage. Green manure nahoile oil cakes @ 6-7 q/ha bhi dibo pare.

PANI DIYA LAGA NIYUM

Mokai ghas te pani kiman lagibo itu to kaun tu mohina te lagabo itu hisab te hi hobo. Mokai te pani diya tu borkon aha hisab te aru mati para kiman pani dhuribo pare itu hisab te hi dibo lage. Mokai tu beshi pani dileybhi morijai aru pani nathakilebhi morijai, hoilebhi beshi borkhon pani para tu tai eku nahoi jodi kheti te pani tu beshi deri jama nahoile.

JUNGLE GHAS SAPHA KURIA NIYUM

Jungle ghas khan to mokai kheti te beshi problem ase auro *kharif* season te hoile taikhan mokai logote mol nimite compete kurikina beshi yield komti kuride. Itu karne yield beshi pabo koile timete habi khan phelaikina nirani kuribo lage.

Nirani kurialaga: Mokai ghas khan knee-high stage na pahungcha agete one/two bar pharwa cholaikina mati bhitorte hawa jabo dibo lage auro habi khan rassi para ulai kina phelabo lage.

Pre- Plant incorporation (PPI): Metolachlor (Dual) @ 1.5–2.0 kg a.i. ha⁻¹ and Pendimethalin (Stomp @ 1–1.5 kg a.i.ha⁻¹).

Ghas uthia agete: Simazine nahoile Atrazine (Atratraf 50%WP) @ 1–1.25 kg/ha in 600 liter pani logote spray kuribo lage.

Ghas uthia pichete: 2, 4-D nahoile Banvel – D (Dicamba) @ 1.5 to 2.0 kg a.i. /ha spray kuribo lage.

BIMAR ARU PUKA PARA BACHABOLE NIYUM

Amakahn jaga te to hybrid aru composite mokai khan bimar aru puka ahilebi, taikhan nijor ke bachabo pare. Hoilebe bimar aru puka lagishe koile time te kheti kora manu khan hoshia kurile nuksan tu komti kuribo pare.

1. Bimar

(i.) **Seedling blight:** Mokai puli khan to kisam–kisam fungi para lagi kina morijai. Itu rukhabo nimete bijon khan to Captan/Thiram @ 3 gm/kg te melai kina lagabo la ge.

(ii) **Soft rot:** Itu tu bacteria *Erwinia chrysanthemi* para lagia bimar ase, itu bimar to lagashekoile mati level para loikina pura mokai ghas te lagijai. Itu bimar te patta aru ghas te pani thakikina ghao ulai. Itu bimar control kuribo koile kheti te pani jama hobo nadibo lage aru bleaching powder (33% Chlorein thaka) @ 10 g/liter pani te milaikina mati to bhijaidibo lage.

(iii) **Common rust:** Northeast te itu bimar beshi common ase. Bimar ulalogote Zineb solution @ 2–2.25 g/liter pani te milaikina spray kuribo lage. Pata te itu bimar ulai le to 10 din majote spray kuribolage.

(iv) **Smut:** Itu bimar to mokai phool te guti nishina ulai. Enika bimar dikhishe koile bimar thakia mokai ghas khan to rassi logote ulaidibolage aru Nitrogen dose to komti koribolage. Long duration crop rotation kurilebi itu bimar to naulabo.



2. Puka

Stem borer: Itu puka ulaile chootu ghas para loikina dangor ghas tak ke hamla kori ghas laga bhitor to moraide.

Control: Monochrotophos or Endosulfan 35 EC @ 3 ml/l pani te melai kina ropai kora 20 din pichete spray koribo lage nahoile Trichocards @ 7 cards/ha 15 din majote 2-3 bar apply koribo lage.

Shoot fly and Aphids:

Itu puka khan para bachebo karne Bijon nalagia age te mokaibijon halibo le thakia line te 10% Phorate (Thimet) granules @ 15kg / ha lagabo lage. Aru germination hoikina

ek shapta pichete 0.01% Metasystox (1ml in a lt. of water) @ 560 lt./ha bhi spray koribo pare.

Cut worm: Itu puka para mokai ghas tu chootu thakia time te mati level te katidey. Bisa khan te grey colour hoi aru din te mati bhitorte thaki kina rati te ghas tu kati dey.

Control: Mokai ghas laga niche portion (base) te 10% Folidol nahoile 3% Heptachlor @ 20-25 kg / ha dusting koribolage.



MOKAI KATIBOLE ARU GUTI ULABOLE NIYUM

Kitia mokai tu tan/bura hoijabo aru brownish colour hobo titia mokai tu katibo lage. Itu time te moisture content tu 20% para beshi nahobo lage aru





mokai te chuli khan pura sukhijai. Local mokai khan to 1-2 t/ha pai aru hybrid khan to 4-6t/ha pai.

MOKAI BIJON RAKHIBOLE NIYUM

Mokai laga gutti khan to 7% moisture content tak sukhabo lage aru 700 gauge polythene bags te pack korikina store koribo lage.

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