

Iimpembelelo zoqoqosho

Esisifo sithi sithobe ukulunga kunye nomgangatho weziqhamo zesitrasi kuzo ekugqibeleni imithi eyosulelekileyo ingabi namveliso. Umthi owosulelekileyo uvelisa iziqhamo ezingafanelekanga ukuba zithengiswe njengeziqhamo ezisemgangathweni okanye ekunokwenziwa incindi ngazo. Sisitshabalalisi esivalelwayo kumazwe esingekabikho kuwo okwanguku. Ukusasazeka kwesi sifo kwilizwe ngaphambili ebelingenazo izitshabalalisi kunokuphazamisa ithuba lelo lizwe lokufikelela kwiimarike ezinokuba khona zesitrasi ezinokungenisa impahla evela kwimimandla engenaso isifo semithi yesitrasi. Esisifo sithi sidale uxinezelelo olumandla ufikelelo kwiimarike zesitrasi zamazwe ngamazwe ezingundoqo, ezifana nezase-Melika kunye nemanjano yaseYurophu.

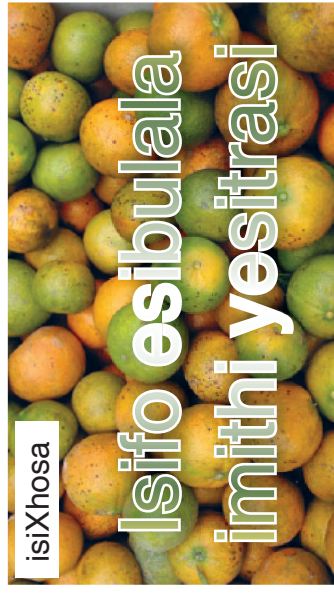
Iimpembelelo zomthetho

NgokomThetho weziTshabalalisi wezoLimo, 1983 (umThetho oyiNombolo yama-36 ka-1983), amaNyathelo oLawulo R. 110 wama-27 Janywari 1984 (njengoko utshintshiwe), ukususwa kwembewu yokudala izityalo ezitsha ukusuka komnye ummandla ukuya komnye kwiRiphabliki yoMzantsi Afrika kuthintelwe ngaphandle kokuba ukususwa ke oko kugunyaziswe ngendlela yemvume okanye imathiriyeli iqinisekise njengengenazo izitshabalalisi. ISebe lezoLimo, amaHlathi nokuLoba linika iinkonzo zokuhlola kwaye likhuphe iimvume ukuqinisekisa ukuthotyelwa kwamanyathelo olawulo asebenzayo. Olu ngenelo lukhankanywe ngasentla luyakunceda ukuthintela ukusasazeka okungaphaya kwesifo esimandundu semithi yesitras.

Iimithombo yolwazi

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‘*Candidatus Liberibacter africanus*’
‘*Candidatus Liberibacter asiaticus*’
‘*Candidatus Liberibacter americanus*’

Inkcazo

Isifo esibulala imithi yesitrasi saziwa ngokuba sisifo se-yellow dragon okanye i-Huanglongbing, sesinye sezifo yintsholongwane

yesitrasi. Zintathu iintlobo ezaziwayo intshongwane ebanga isifo semithi yesitrasi, zezi luhlobo lwase-Afrika (‘*Candidatus Liberibacter africanus*’), uhlobo lwase-Asia (‘*Candidatus Liberibacter asiaticus*’) kunye nohlobo lwaseMelika (‘*Candidatus Liberibacter americanus*’). Uhlobo lwase-Afrika lunobuntununu ebushushwini kwaye iimpawu zivela phantsi kweemeko ezipholileyo (20–kuya kuma kuma–32 °C). Kuncinci kwaziwayo ngokweemfuneko zeqondo lobushushu kuhlobo lwaseMelika.

Imvelaphi kunye nokusasazeka kwihlabathi jikelele

Esisifo semithi yesitrasi mhlawumbi saqala e-China ngoo-1900s. Uhlobo lwase Asia (‘*Candidatus Liberibacter*’)

Ufuna ulwazi oluthe vetshe?

– ukuxela ukwenzeka okanye ukwenzeka okukrokelwayo kwesifo –

ICandelwana: iMpilo yeziTyalo

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2013

Ishicilelwe kwaye yapapashwa

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agriculture,
forestry & fisheries

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REPUBLIC OF SOUTH AFRICA

bacter asiaticus' ilona lumandundu kwaye olusasa-zekileyo ngokwejografi. Lwenzeka kwi-Asia xa iyonke, ilizwekazi elinganeno lase-Indiya kunye neziquzithi ez-ingabamelwane, usingasiqithi we-Saudi Arabia, iBrazil, amazantsi e-Florida, e-California, Cuba, Mauritius, Reunion naseTopiya. Uhlobo lwase-Afrika ('*Candidatus* Liberibacter africanus') aluchaphazeli kangako. Lufunyanwa e-Afrika, kumazantsi e-Sahara. Uhlobo lwaseMelika ('*Candidatus* Liberibacter americanus') ukuza kuthi ga ngoku luyaziwa ukuba luyenzeka e-Brazil, Cuba, Florida, Belize, Mexicon kwi-Dominican Republic.

Iimpawu

Izityalo zesitrasi ezichatshazelwa yilentsholongwane yesisifo semithi yesitrasi zinokungabonakalisi zim-pawu iminyaka kulandela usulelo. Iimpawu zokuqala emthini ziquka ukuvela kwamahlumelo atyheli. Xa intsholongwane seyingena emthini, umphezulu wonke uyaguquka ube nombala otyheli. Ezintlobo zintathu zentsholongwane ziveza iimpawu ezifanayo. Ezona mpawu zesisifo sibulalayo semithi yyesitrasi zibonakala ngamachaphaza amfakamfaka emagqabi-ni kunye nokuba tyheli kwemithambo kunye namahimelo amagqabi. Amagqabi amancinane anokubonisa iimpawu ezinokungabonwa njengezo zokungon-gophala kwezinki. Amagqabi amadala aba neempawu zamachaphaza esifo. Ezinye iimpawu ziquka ukufa kwamasetyana, ukudubula okulambathayo kunye

nokukhula okuhamba kancinane. Iziquhamo ezivela kwimithi enesifo zincinane, kaninzi zinokungaqheleki kwaye umbala oluhlaza uyasala nakwisiqhamo esivuthiweyo. Iziquhamo ezichatshazelwe sisifo semithi yesitrasi ziyakrakra, zingathi ziyiyeza kwaye zimuncu. Kaninzi imbewu iyaphuma kaninzi, kwaye ukudaleka kwesiqhamo kuyalambatha. Iimpawu ziyohlukana ngokuxhomeke kwixesha losulelo, ibakala lesifo, iintlobo zemithi kunye nokuvuthwa komthi.

Ukusasazeka

Esi sifo kakhulu sisasazwa ziintlobo ezimbini zes- inambuzane ze-psyllid, ezizezi i-Asian citrus psyllid (*Diaphorina citri*) kunye ne-African citrus psyllid (*Trioza erytreae*). Zombini ezi ntlobo zisasaza intsholongwane yesifo semithi yesitrasi ziyisusa kwimithi eyosulelekileyo ziyisa kwimithi enempilo njengoko zisitya izityalo. Isifo semithi yesitrasi sinokusasazwa nalweluphi ilungu lwesitrasi elisetyenziwayo njengembewu (izithole, amalungu amasebe njalo njalo)

Ukohlukana kwezinto esihlala kuzo

Isifo esimandundu semithi yesitrasi eMzantsi Afrika kakhulu sisifo see-orenji eziswiti (*Citrus sinensis*), nee-valencias zibonisa iimpawu ezicacileyo kunee-navels. Kwakhona kwii-mandarins (*C. reticulata*) kunye ne-tangelos (*C. sinensis* x *C. reticulata*), kodwa sibe sincinane kwi-lemon (*C. limon*), imbambusi (*C.*

paradisii) kunye ne-orenji emuncu (*C. aurantium*). Nakuba kunjalo, izivuno ezifana ne-lime (*C. aurantifolia*), i-pomelo (*C. grandis*), ne-orenji ye-trifoliolate (*Poncirus trifoliata*) ziyasinyamezela esi sifo.

Iindlela zokusifumanisa

Eyona ndlela iqinisekileyo yokufumana imithi ekukrokelwa ukuba yosulelwe yintsholongwane yesifo semithi yesitrasi (Huanglongbing) yi-polymerase chain reaction (PCR) kwilebhu egunyazisiweyo yokufumanisa isifo ngeemvavanyo. EMzantsi Afrika, oku kunokwenziwa ziilebhu zokufumanisa isifo zeSebe lezoLimo, ezamaHlathi nezokuLoba e- Stellenbosch.

Iindlela zolawulo

Ukulawulwa kwesifo esibulala imithi yesitrasi kunokuphunyezwa ngendlela ehlanganisiweyo equka ukupheliswa kwemathriyeli yezityalo eyosulelekileyo, kuveliswa izityalo ezicocekileyo zomyezo wezityalo, ukubambelela kumanyathelo olawulo kunye nokuphelisa izithwali zinambuzane ngendlela yezibulala zilambuzane (kuba zidla incindi). Ukunyanga imithi eyosulelekileyo ngeenaliti zezibulala-ntsholongwane kuphelisa iimpawu kodwa ke akuzinyangi izityalo ezinesifo. Kucetyiswa ngamandla ukususwa ngokukhawuleza kwemithi enesifo.



Iimpawu eziluhlobo lwamachokoza afaka-faka esitrasi kwisitrasi spp



Umonakalo odlwala yilesitrasi -psyllid kumagqabi esitrasi



I-orenji eyosulelekileyo



Umbungu wepsyllid yesitrasi yase-Asiya



I-Psyllid yesitrasi endala yesitrasi yase-Asiya



I-Psyllid yesitrasi endala yesitrasi yase-Afrika



Umbungu wepsyllid yesitrasi yase-Afrika