

## Diqsigira miraha Mareerka gala, *Rhagoletis mendax*

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Laanta barashada Cayayaan ee Jaamacada Minnesota

### HORUDHAC

Diqsigira miraha galaa, (*Rhagoletis mendax*) waa cayayaan dhireed ka mid ah nooca (*Vaccinium* genus), oo gala xataa miraha mareerka ee ganacsi ahaanta loo beerto. Diqsigira miraha mareerku waxa uu quutaa iniinyaha miraha mareerka ku jira taaso keenta miro aan la suuq geyn karin. Nasiib wanaag, in kastoo uu ka soo askumay diqsigira miraha mareerku Waqooyiga Mareykanka, diqsigira miraha mareerka gala wali lagama helin gobolka Minnesota. Hase yeeshee sannadkii 2016 waxaa la xaqiijiyey in laga helay labo degmo oo ku taal Bartamaha Gobolka Wisconsin. Maadaama uu sii wado faafid, beeralayda miraha mareerka ee gobolka Minnesota waa ay ogsoon yihiin cayayaankan iyo in laga yaabo in uu ku soo faafo gobolka Minnesota.

### BAAY'OOIJIGA

Diqsigira waaweyn ee miraha mareerka galaa waa diqsi midab madow leh oo qiyaastii dherarliisu yahay ½ cm. Astamaha lagu garto diqsigira waxaa ku jira boga hoose in uu ku leeyahay baro mad-madow oo ifa oo cirifka ku leh dhibico cad, (scutellum), iyo garbo muuqda oo leh diilimo madow oo leh qaabka xarafka “W” ama “M” (Muuqaal. 2). Diqsigira miraha mareerku ee waaweyni waxa uu aad ugu eg yahay diqsigira tufaaxa (*R. pomonella*) (Muuqaal.3). waxaana sidoo kale lagu khaldaa diqsigira ankaaxka



**Muuqaal 1.** Diqsigira miraha mareerka adult (Jerry A. Payne, USDA Agricultural Research Service, <https://bugwood.org/>) <https://bugwood.org/>

(*R. cingulata*) iyo diqsigira kale ee khudrada gala (*R. fausta*). Si quman u garashada diqsigira waxa badanaa ku xiran tahay diilimaha garbaha, dherarka makaanka dhadiga iyo saxaaxa labka.

In kasto aan la isugu halayn karin sida astaamihii hore hadana badnaa waxaa la is yiraahdaa hadii diqsigira lagu dhex qabto (*Rhagoletis*) asagoo ku dhex jira miro mareer, waxay u badan tahay in uu yahay diqsigira miraha mareerka.

Diqsigira miraha mareerku waxa uu ka galaa ciida xiliga qaboobaha. Koofurta-Galbeed ee gobolka Michigan, diqsigira waaweyni waxa ay soo baxaan agagaarka bisha Juun soo bixidaasina waa ay sii socotaa ilaa iyo bisha Luulyo oo dhan iyo waliba horaanta bisha Augusto (Isaacs 2017).

Guud ahaan, xiliga soo bixidu wuxuu ku soo aadaa kolka midabka miraha mareerku isbedelo. Soo bixida ka dib, diqsiiga dhadiga ahi wuxuu si xayid ah u raadisaa miida ubaxa geedaha ka dhiima. Dhadigu waxa ay u baahan yihiin qiyaastii 7 ilaa iyo 10 cisho si u gaaraan xilo galmo, kolkaa ay bilaabaan in ay ugxan dhalaan. Ugxanta waxa la dhex galiyaa xuubka miraha mareerka ee bislaanaya, iyadoo hal mid uun la galinayo halkii mirba.



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**Muuqaal 2.** *R. mendax* waaweyn (Jerry A. Payne, USDA Agricultural Research Service, <https://bugwood.org/>).



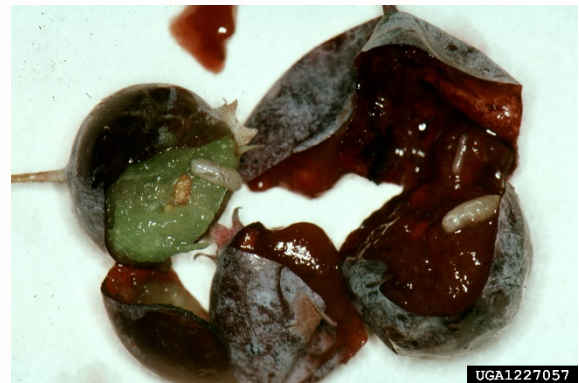
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**Muuqaal 3.** *R. pomonella* waaweyn (Joseph Berger, <https://bugwood.org/>).

Ugxantu waxa ay ku dilaacdaa ilaa iyo 5 cisho dixiruguna kolkaa ayuu bilaabaa quudinta (ugxan), taasoo dhameytirka koriimadooda ay ku dhex korayaan hal mir oo miraha mareerka. Kolka ay gaamuraan diqsiyadu dhulka ayey ku soo dhacaan ka dibna ciida ayey qotaan si ay u gaamuraan, halkaa ayey ku jiri inta laga gaarayo Gu'ga dambe.

### KHASAARAH

Diqsiyada miraha mareerku waxa ay quutaan miraha mareerka (Muuqaal. 4), Sidaa awgeed, mirahu waxa ay noqdaan kuwa jilicsan waana ay ka soo daataan geedka. Marmarka qaarkood, astaamaha lagu garto diqsiiga yar yar ee miraha cunaya ma muuqdaan ilaa iyo ka dib kolka miraha la soo goosto marmarka qaarkoodna lama arko ilaa iyo mirahu at galayaan gacanta macaamiisha.



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**Muuqaal 4.** diqsiiga miraha mareerka oo quudanaya miraha mareerka (Jerry A. Payne, USDA Agricultural Research Service, <https://bugwood.org/>).

### MAAREYNTA

Maadaama uu diqsiiga miraha mareerku aan wali laga helin beeraha ganacsiga ee Minnesota, talada hada aan soo jeedinaynaa waxa ka soo jeedaa wixii loogu arrimiyey gobolada Wisconsin iyo Michigan.

### La socodka

Beeraleyda miraha mareerka beertaa waa in ay la socdaan ayna isticmaalaan kaarka jaallaha ah ee xabagta leh “qaabka v” u eg “v-oriented” (Geddes et al. 1989) ee lagu laray ammonium acetate. ammonium acetate waxay moodaan diqsiyada waaweyni cunto (miid). Cilmi-baarayaasha Jaamacada (Michigan State) waxa ay ku taliyaan in la dhigo dabida ku dhex jirta dallada 1-2 asbuuc ka hor inta miraha mareerku aysan bilaabin in bislaadaan, xiliga oo dhan waa in la sii wadaa in lala socdo.



**Muuqaal 5.** Kaarka jaalaha ah ee xabagta leh ee “qaabka v” u sameysan V-orientation ee lagala socdo diqsiyada miraha mareerka (Rufus Isaacs, MSU).

### Xakameynta Faafida

Dhowr hab ayaa la isticmaali karaa oo ay ku jiraan in daliga beerta la gooyo waqtigii loogu tala galay iyo in looga gooyo beerta miraha siyaadada u bislaada si si ugu dhaqso badan si loo yareeyo in diqsiyada miraha mareerku uu ukun u dhalo ayna ukuntaasi u sii korto, beeraleyda nawaaxiyo kale oo wadanka ka mid ahi waxa ay u direen dadka kala gura miraha oo hal weel ku gura miraha fiican, weel kalena ku gura wixii miro ah ee aad u bislaada kuwaa oo la daadiyo. Habkan waxaa

laga yaabaa in uu si fiican ugu shaqeeyo beeraha iska yar laakiin uusan si fiican ugu shaqeyn beeraha waaweyn ee ganacsiyada waaweyni ay leeyihiin.

### Sun ku Xakameynta

Xeelada ka dambeysa sun ku xakameynta diqsiyada ku dhasha miraha mareerka waxa ay ahayd in dilo diqsiyada waaweyn ee gaamuray ka hor inta aysan (diqsiyo) bilaabin in ay ukun dhalaan, maadaama aysan jirin jid taabo gal ah oo lagu xakameyo marxaladaha diqsiyada maro inta uusan gaamurin. Talooyinka iminka lagu taliyaa waxa ay qabaan in lagu buufiyo beerta sunta xasharaadka disha 5-7 maalmood gudahood kolka la qabto diqsiyada ugu horeeya.

Jaamacada Gobolka Michigan (MSU) waxa ay ogaatay in tijaaboyinka goobeed la sameeyey iyadoo la adeegsanayo cadaadis sare oo cayayaan iyo markiiba labo asbuuc oo buufin ah in kolkaa waxtarka suntaa lagu dilayey xasharaadka loo aqoonsaday in ay tahay mid aad u fiican oo wax weyn ka qabatay ciribtirka diqsiyada gala miraha mareerka. Intaa waxaa dheer, Exirel waa xasharaad dile ka tirsan noocyada kiimakada ah ee la yiraa (diamide) oo la xaqiijiyey kolkii ay tijaabisay Jaamacada (MSU) inay tahay mid si fiican u xakameysa taranka diqsiyada ku dhasha miraha mareerka.

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## Tixraacyada kale ee la Xiriira

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Beeralayda ka shakiya in ay dhici karto in ay ka heleen Diqsiga miraha galaa beertooda waa in ay qaadaan saamiyo ka dibna kala soo xiriiraan Mashruuca ka Digtoonaanta Dulinka ee MN (MN Pest Alert Program), emaylka: [arrest.the.pest@state.mn.us](mailto:arrest.the.pest@state.mn.us).