



FBMG Help Desk  
**Question of the Week**

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Are all varieties of milkweed safe for Monarchs?

*Answer: Studies suggest not*



# For Monarchs, not all milkweeds are equal

## Non-Native and Native Milkweed

The monarch is an obligate feeder on milkweed. Individuals always lay their eggs on a milkweed plant and the larvae only develop on various species of milkweed.

*There are two categories of milkweed plants:*

### Non-Native Milkweed Native Milkweed



*Tropical Milkweed*  
(*Asclepias curassavica*)



*Whorled milkweed*  
(*Asclepias verticillata*)



*Swamp Milkweed*  
(*Asclepias incarnata*)

The most readily available milkweed variety for home ornamental use has been the Non-Native Mexican or Tropical Milkweed (*Asclepias curassavica*)

*However, it may not be best for Monarchs*



*Antelopehorns*  
(*Asclepias asperula*)



*Butterfly milkweed*  
(*Asclepias tuberosa*)

An amazing resource to see where different milkweed varieties grow in our area:  
[https://tpwd.texas.gov/publications/pwdpubs/media/pwd\\_rp\\_w7000\\_1803.pdf](https://tpwd.texas.gov/publications/pwdpubs/media/pwd_rp_w7000_1803.pdf)



# For Monarchs, not all milkweeds are equal

## Cardenolides



*Several milkweed varieties produce toxic chemicals called **cardenolides**, which are toxic to Monarch predators. So Monarchs lay their eggs on these milkweed plants to protect their caterpillar offspring from being eaten.*



*Warmer temperatures can increase the cardenolide levels in **Tropical Milkweed** (*Asclepias curassavica*) to the point it can poison the caterpillars, delaying growth and leading to butterflies with stunted forewing length.*



*Warmer temperatures don't radically change cardenolide levels in **Native Milkweed** (*Asclepias incarnata*) because it naturally produces fewer toxic chemicals than Tropical Milkweed.*

**Native Milkweed is better for Monarchs!**

# For Monarchs, not all milkweeds are equal

## Protozoan parasite

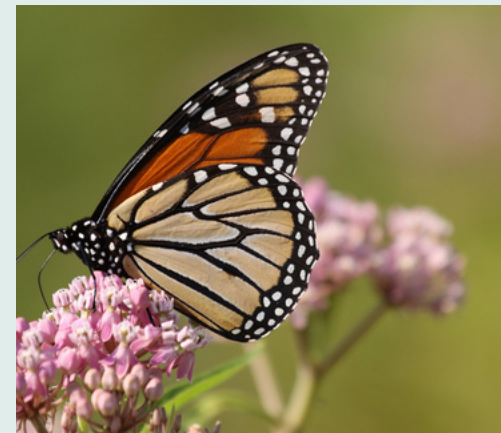
**Ophryocystis elektroscirrha (OE)** is a harmful protozoan parasite that often travels with Monarchs on their migration



*Because Tropical Milkweed will retain its leaves longer, it exposes Monarch larvae to Ophryocystis elektroscirrha (OE) for longer periods of time.*



*Because Native Milkweed leaves die back after blooming, and the parasites die with them, the Monarch's exposure is reduced.*



Tip: If you have Tropical Milkweed, cut it down to the ground

**Native Milkweed is better for Monarchs!**



# For Monarchs, not all milkweeds are equal

## Migration Interruption

The Monarchs that migrate through Texas overwinter in the same 11 to 12 mountain areas in the States of Mexico and Michoacan from October to late March.



*Because Tropical Milkweed has a longer life cycle, it may be harmful to the Monarch's traditional migration patterns.*



*It is believed that the long migration effectively weeds out weak or diseased individuals, while at the same time removing the population temporarily from local pathogens.*



*Tropical Milkweed encourages Monarchs to stay in one spot and is likely to form less-healthy (non-migratory) populations.*



**Native Milkweed is better for Monarchs!**



***Do you have questions  
about your home  
landscape and plants?***

***Contact the Fort Bend  
Master Gardener Help Desk***

***Email:  
FortBendmg@ag.tamu.edu***

***Phone:  
281-341-7068***

***The Help Desk is manned  
Monday thru Friday,  
9am-Noon***

***References:***

***[https://tpwd.texas.gov/publications/pwdpubs/media/pwd\\_rp\\_w7000\\_1803.pdf](https://tpwd.texas.gov/publications/pwdpubs/media/pwd_rp_w7000_1803.pdf)***

***<https://citybugs.tamu.edu/2015/03/05/for-monarchs-not-all-milkweeds-are-equal/>***

***References:***

***[https://www.lsu.edu/mediacenter/news/2018/04/03/bio\\_faldyn\\_monarchs.php](https://www.lsu.edu/mediacenter/news/2018/04/03/bio_faldyn_monarchs.php)***

***<https://www.lsuagcenter.com/articles/page1659469273147>***

***<https://npsot.org/wp/planet-profiles/a-few-of-our-native-milkweeds/2235/>***

***[https://www.fs.usda.gov/wildflowers/pollinators/Monarch\\_Butterfly/migration/index.shtml?](https://www.fs.usda.gov/wildflowers/pollinators/Monarch_Butterfly/migration/index.shtml?fbclid=IwAR17cqz8_tHTDC_c5kg422hr4oe0ZohyoH7Z2tjMY2H7WDV56iEZxwvyF7A)***

***[a](https://www.fs.usda.gov/wildflowers/pollinators/Monarch_Butterfly/migration/index.shtml?fbclid=IwAR17cqz8_tHTDC_c5kg422hr4oe0ZohyoH7Z2tjMY2H7WDV56iEZxwvyF7A)***

***[https://www.lsu.edu/mediacenter/news/2018/04/03bio\\_faldyn\\_monarchs.php](https://www.lsu.edu/mediacenter/news/2018/04/03bio_faldyn_monarchs.php)***

