SOMETHING INTERESTING ABOUT ISOPODS

Isopod introduction
There are land isopods and ocean isopods.
Land isopods:
Live on land, have gill-like organs, cannot survive in water, better for a pet insect.
Ocean isopods:
Live in ocean, ancestors of land isopods, usually bigger than land isopods.

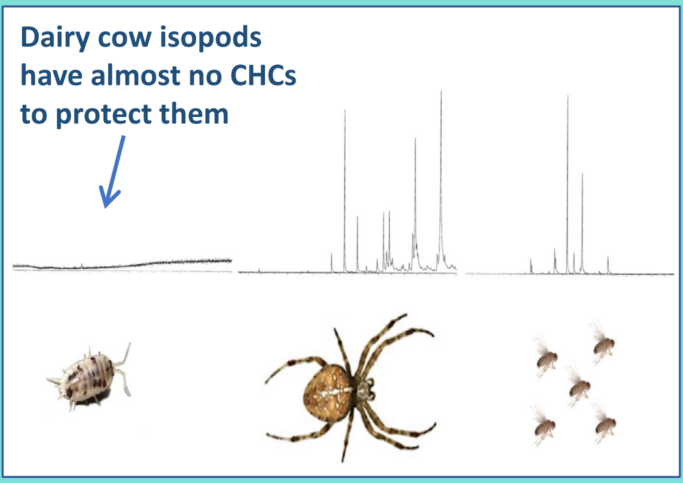
Characteristics of isopods:
Like dark and wet places, eat almost everything.

Characteristics of isopods： Different breath system

Land isopods and ocean isopods:
Both use gills to breathe, but land isopods can't survive in water for very long. Keeping them moist helps their gills breathe air better.

Other land insects:
Take grasshoppers, for example. They have two rows of breathing holes on either side of their abdomen to help them breathe oxygen and exchange breath through tubes in their bodies.

Cuticular Hydrocarbons (CHCs)
Compounds in arthropod exoskeletons that keep them from drying out.



Life cycle:

The life cycle of terrestrial isopods, such as Dairy Cows, lasts approximately 2-3 years. Isopods molt, or shed their exoskeletons, about 4-5 times per year (Ramsey, 2014). Eggs are carried in the mother's marsupium, where they hatch into manca, which have six pairs of legs. They then molt into juveniles and leave the marsupium. Juveniles have seven pairs of legs, as do the adults. They continue to feed, molt, and grow, reaching maturity around one year.

Little experiment:
Isopods and wet

1. Cut a half-circle of paper towel that takes up about half of the plate.

2. Press the wet paper towel onto one half of the plate.

3. Add 5 isopods to the wet part and 5 isopods to the dry part.

4. Record how many isopods are on each side once each minute for 5 minutes.

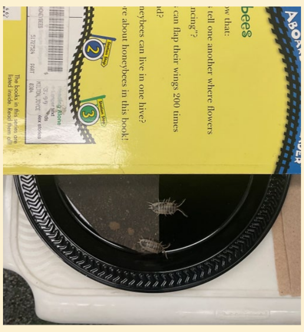
Little experiment:
Isopods and dark

1.Cover half of the plate so half the dry area is exposed and half the wet area is exposed.

2.This creates four different habitat conditions:
wet dark
wet light
dry dark
dry light

3.Add the isopods to the center of the plate.

4.Count number of isopods in different places once every minute for 5 mins.



Reference:
Ramsey, M. 2014. Holy Moly It's a "Roly Poly" - Sowbugs and Pillbugs. UC Master Gardeners of Butte County, Agriculture and Natural Resources, University of California.
https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=12567#:~:text=Full%20development%20to%20an%20adult,later%2C%20the%20front%20half%20molts