



Claim • Evidence • Reasoning

Camponotus chromaiodes

Using the data below, apply the CER Method to the following question:

Does *Wolbachia* infect red carpenter ants?

Methods: Six red carpenter ants (*Camponotus chromaiodes*) were collected from multiple locations across campus. A duplex PCR was performed with primers targeting arthropod CO1 (708 bp) and *Wolbachia* 16S rRNA (438 bp). PCR products were loaded onto a TBE gel (1% agarose) stained with GelGreen. Gel electrophoresis results are shown below.



CLAIM: Write a sentence stating whether *Wolbachia* can infect red carpenter ants.

EVIDENCE: Provide scientific data to support your claim. Use evidence from the above gel electrophoresis results.

REASONING: Describe why/how the evidence supports your claim.



Camponotus chromaiodes image available under Public Domain at [USGS Bee Inventory & Monitoring Lab](https://www.usgs.gov/monitoring-and-evaluation/monitoring/bee-inventory-and-monitoring-lab)