Spider evolution

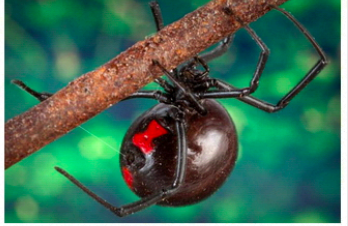
Eriauchenius milloti is one of the 18 new species of pelican spiders from Madagascar described by the scientists.
HANNAH WOOD, SMITHSONIAN

Brian O'Meara
EEB464 Fall 2019

Learning objectives

- Learn about spider diversity
- Learn how this diversity evolved, applying our knowledge of macroevolution







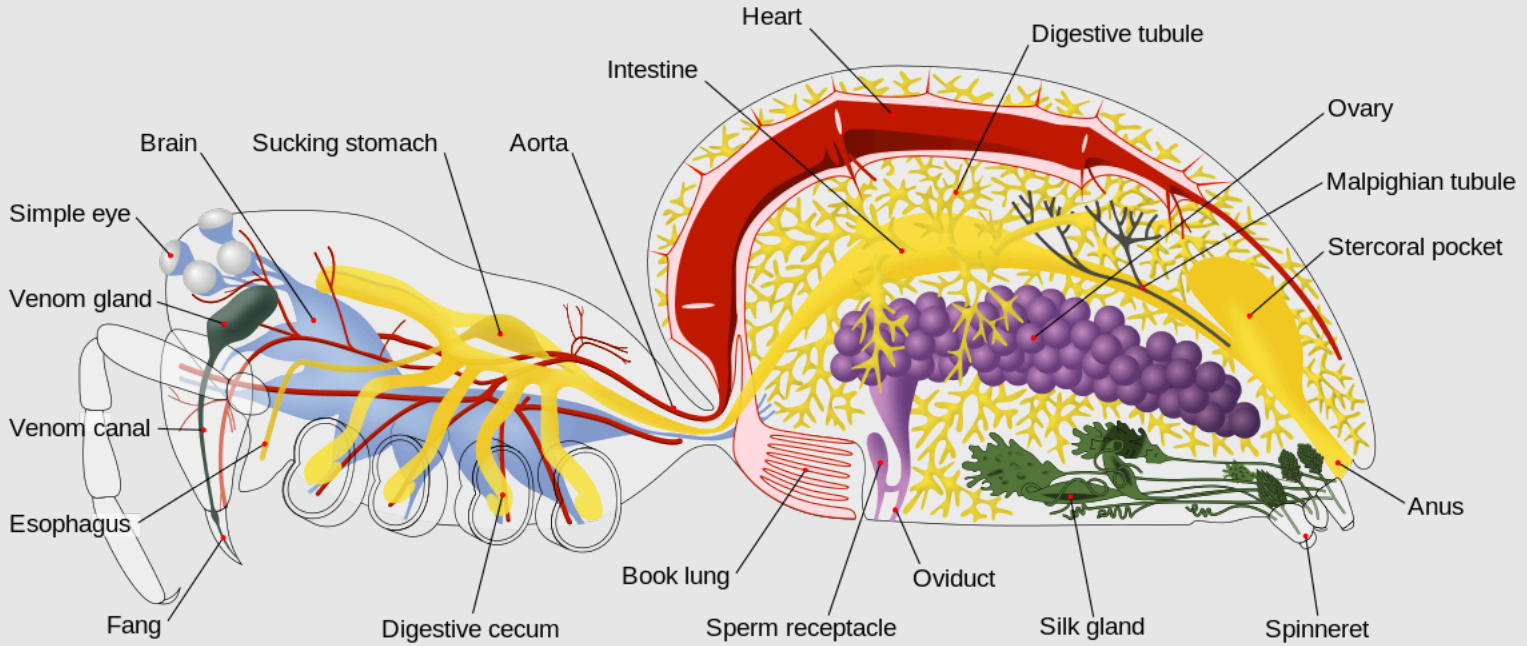




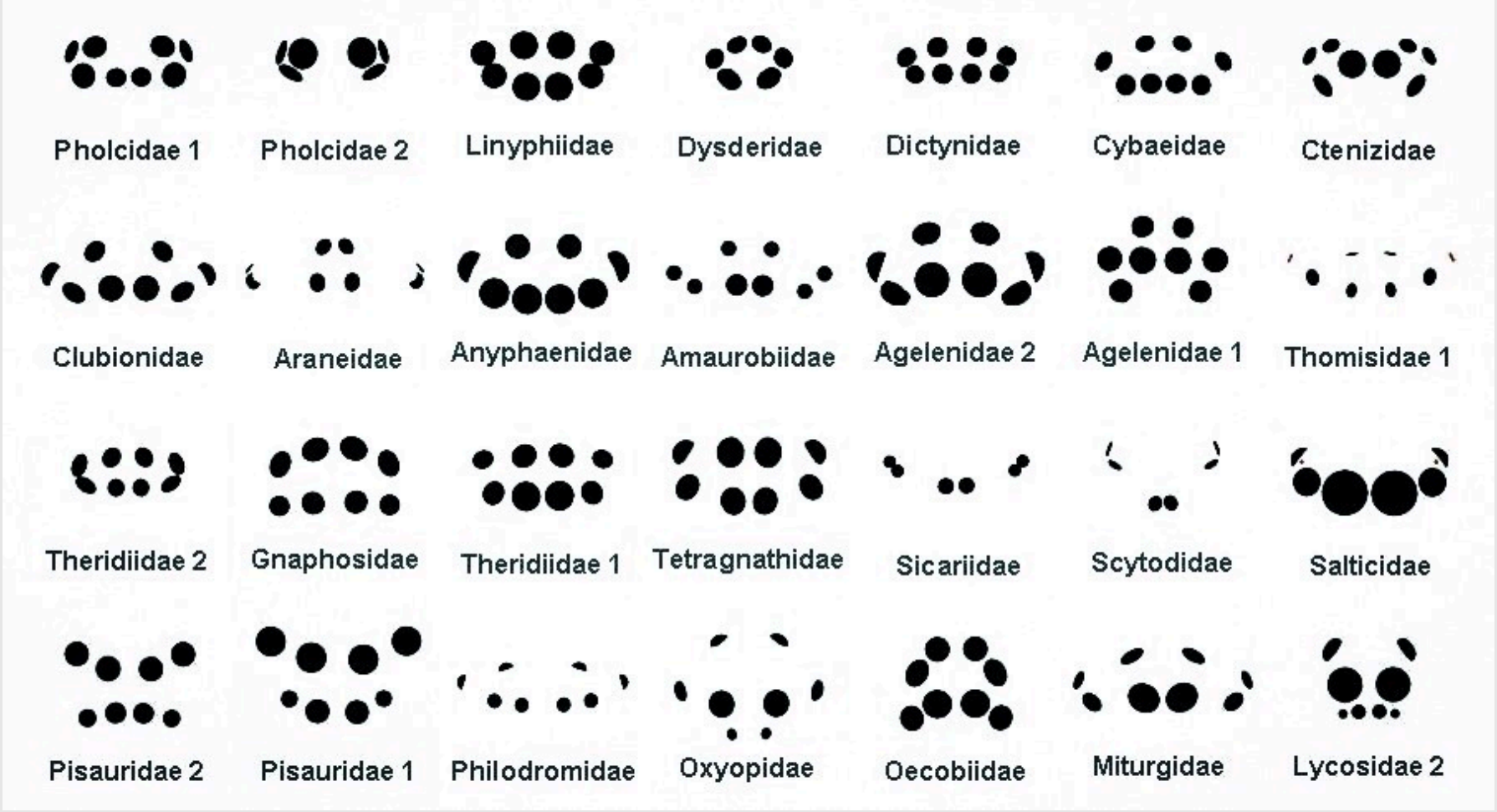




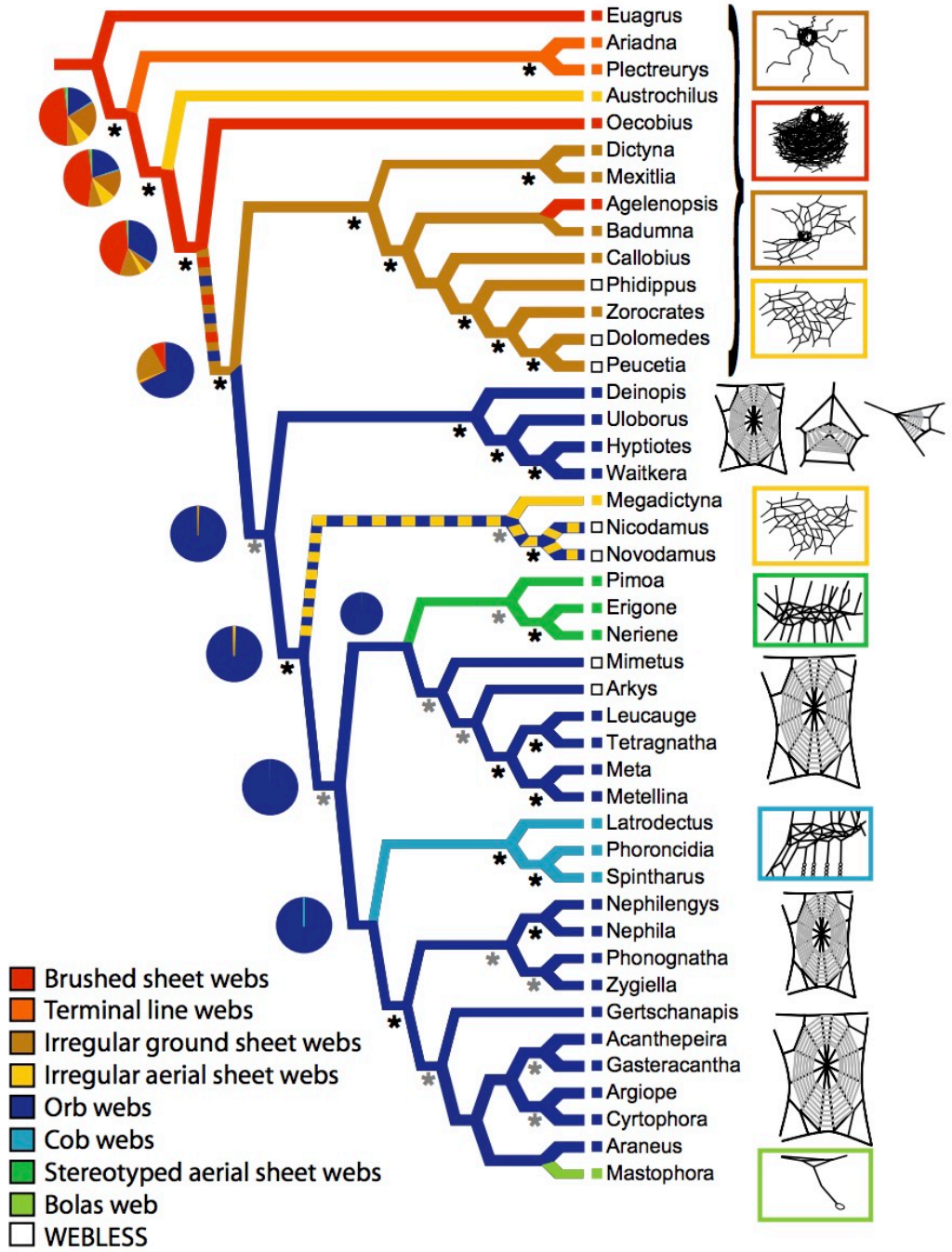


John Henry Comstock, converted by Ryan Wilson

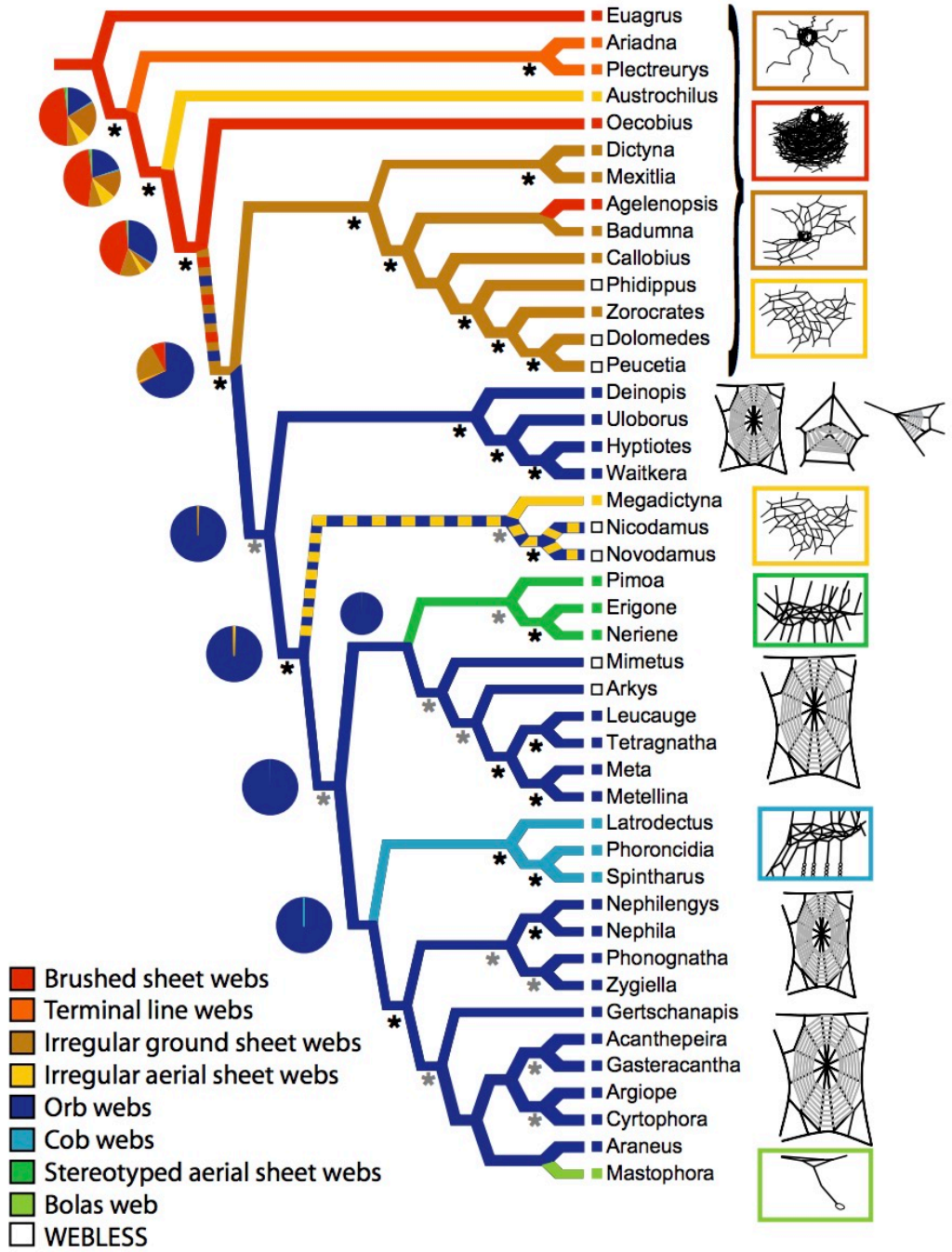


http://anatomicalart.tumblr.com/post/114579992859/bogleech-spider-eye-arrangements



Blackledge et al. 2009 *PNAS*

BBC Earth, *The Hunt* https://www.youtube.com/watch?v=nlRkwuAcUd4. Orb web



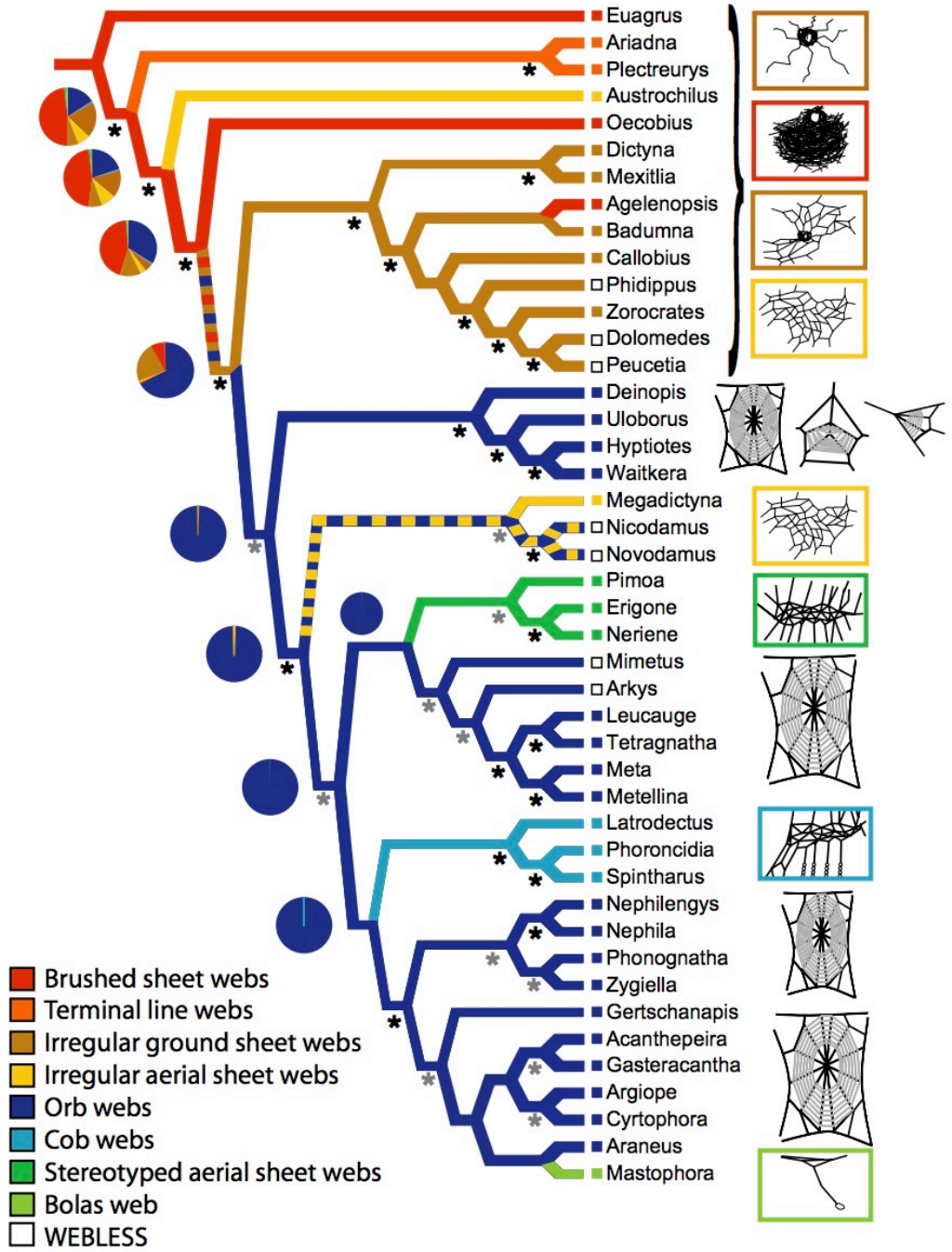
Blackledge et al. 2009 *PNAS*

BBC Earth, *The Hunt* https://www.youtube.com/watch?v=UDtlvZGmHYk. Jumping spider

Do you agree with the narrator that this shows intelligence?

How could this have evolved?

How could you test these ideas?

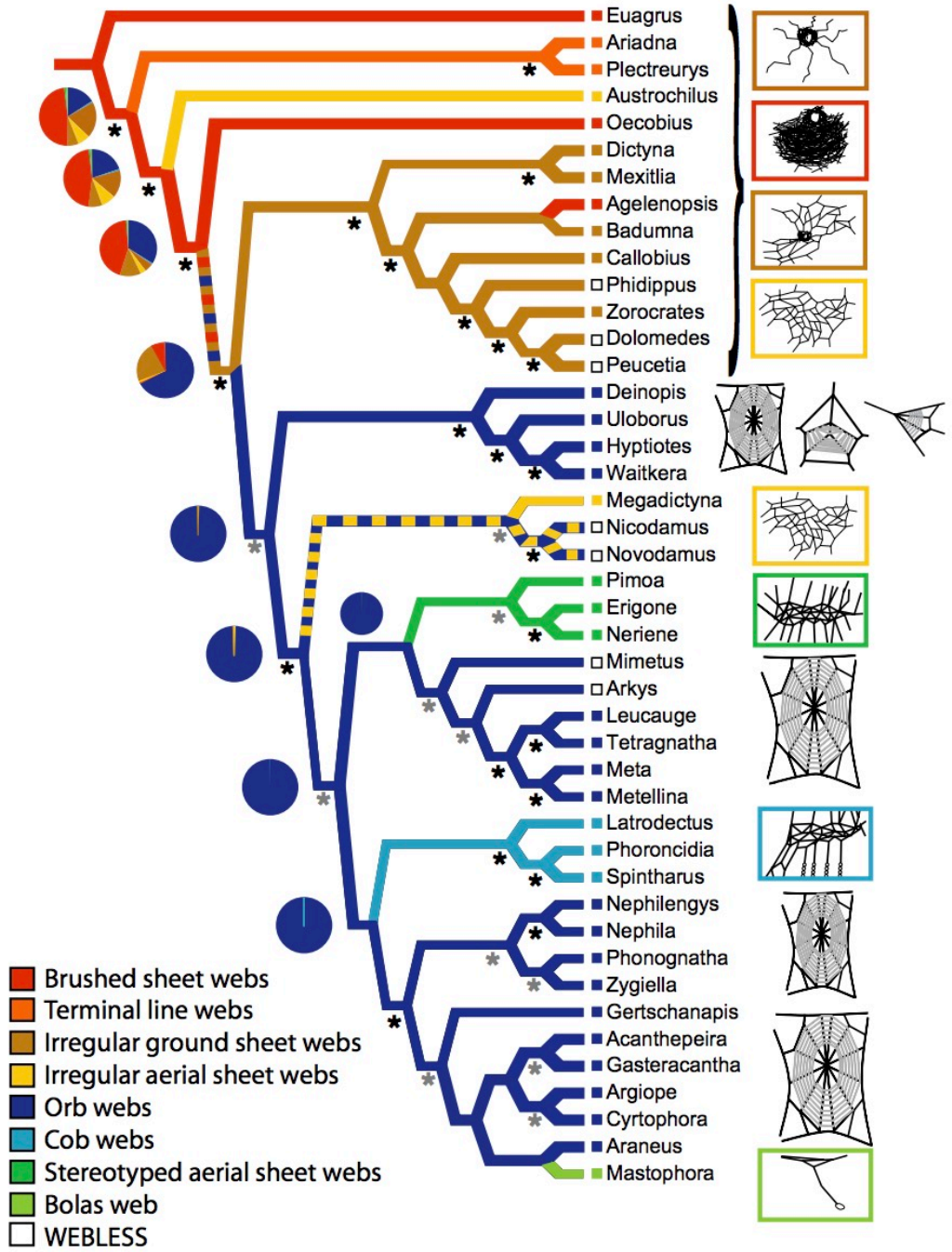


Blackledge et al. 2009 *PNAS*

BBC Earth, *Life in the Undergrowth* https://www.youtube.com/watch?v=EWec266Lo3Q. Bolas spider

How could this foraging strategy have evolved?

How could you test these ideas?



Blackledge et al. 2009 *PNAS*

BBC Earth, *Life Story* https://www.youtube.com/watch?v=PQbScg3r1oQ. Spider courtship

Why might this courtship dance have evolved?

How could you test these ideas?