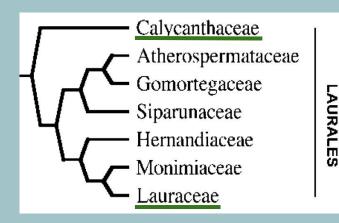
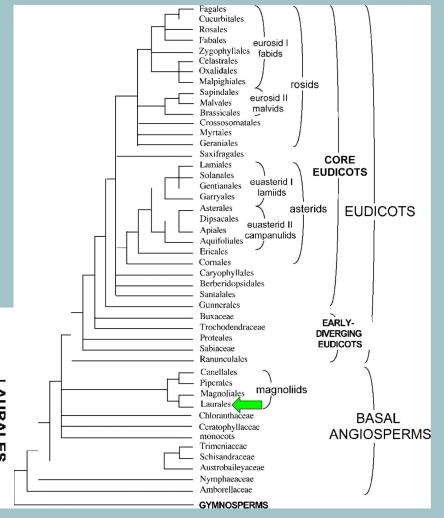


# **Taxonomy**

- 7 families, 91 genera, and 2,500 2,800 species [1]
  - Compare to Asterales (28k spp.) Asparagales (36k spp.)
  - o Lauraceae: 55 genera, 2,200 2,500 spp.
  - Monimiaceae: 28 genera, ~200 spp.
- Among the oldest flowering plants
  - o Early Cretaceous, up to 127 mya [2]
- Contested inclusions: Amborellaceae, Trimeniaceae
  and Chloranthaceae [1]
- Current taxonomy based on molecular data [1]





## Distribution and Abundance

- Mostly tropical and subtropical regions
- Representative species on all continents except Antarctica [3]



- One species: Gomortega keule [3] · Maulino Forest, Chile
- Wildfire risk [4]

- · 6 or 7 genera • 16 species
- Australia (11), Tasmania (1), New Guinea (2), New Zealand (1), New Caledonia (1), and Chile (2) [3]



• Hernandiaceae - 5 genera, 55 species [3]

- 2 genera, 75 apecies • Glossocalyx (4 spp.)
- West Africa • Siparuna (71 spp.)
  - Mexico Central America South America

- 3 genera Largest genus: Hernandia (22 spp.)
- Worldwide tropical and subtropical distribution
  - · 2 genera

- 22 genera, 200 spp. (2nd largest) Mostly S. hemisphere
- New Guinea, Madagascar, Australia, neotropics
- Africa (1), S. Chile (1)

Images from: https://www.mobot.org/mobot/research/apweb/orders/lauralesweb.htm

## Distribution and Abundance



- California native: California bay: *Umbellularia californica* [5]
- 50 genera, up to 2,500 spp.
- Largest diversity in SE Asia, tropical America (esp. Brazil)
- Largest genus: Ocotea, 400 spp.

Tropical America, South Africa, Mascarene Islands [3]



- California native: Spicebush, Calycanthus occidentalis [6]
- 3 genera, 10 species
- Calycanthus (3)

California, southeastern US, China

• Chimonanthus (6)

China

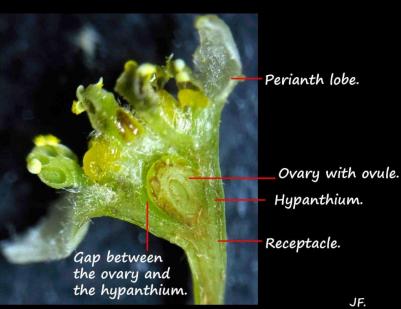
• Idiospermum (1)

Australia [3]

## Characteristics

- No single unifying characteristic
- Oddball genus: Cassytha [3]
  - Rootless parasite
  - Genetic information confirms inclusion in Laurales
- Woody
- Aromatic oils
- Perigynous or epigynous flowers
- Two or no aperture pollen





Above: Congenital fusion of all outer floral parts into a hypanthium, https://bsapubs.onlinelibrary.wiley.com/doi/10.3732/ajb.0800047

#### Image from:

https://www.botanybrisbane.com/plants/lauraceae/cinnamomum/cinnamomum-camphora/

Left: Cassytha filimoris in SWFL on Ceratiola ericoides. Image author: Bobyellow.Taken from Wikipedia

# Non-Native Species in California



### <u>Lauraceae</u>

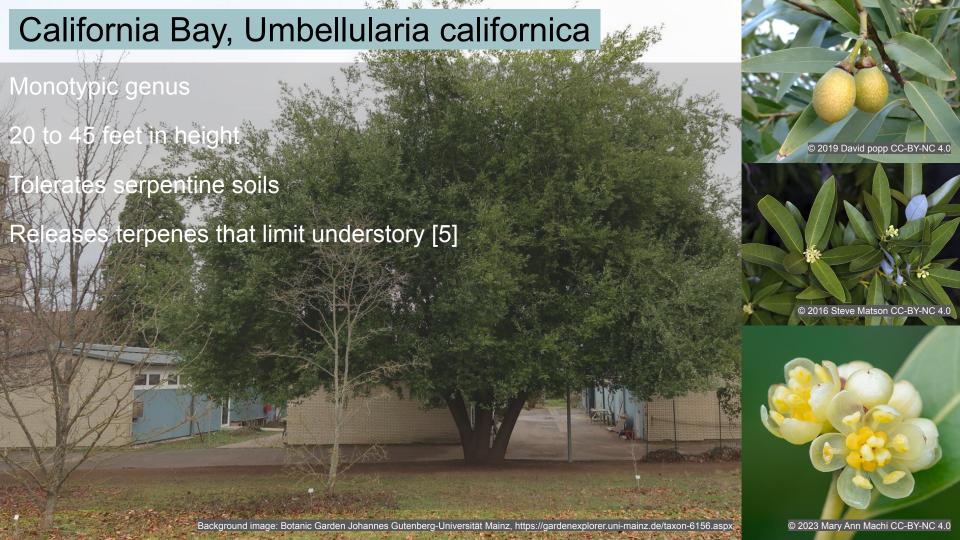
- Avocado, Persea americana
- Mexico
- Important food crop

### **Lauraceae**

- Sweet Bay, Laurus nobilis
- Mediterranean
- Culinary uses

### <u>Lauraceae</u>

- Camphor Tree, Cinnamomum camphora
- Asia
- Camphor made from wood





### Works Cited

- [1] Renner, Susanne S (May 2011) Laurales. In: eLS. John Wiley & Sons, Ltd: Chichester.
  - DOI: 10.1002/9780470015902.a0003695.pub2
- [2] Pirani and Prado, "Laurales," Missouri Botanical Garden, 2015, http://www.mobot.org/mobot/research/apweb/orders/lauralesweb.htm.
- [3] Berry, P.E., Sampson, F.B. "Laurales." Encyclopedia Britannica, June 5, 2023. https://www.britannica.com/plant/Laurales.
- [4] IUCN. 2022. The IUCN Red List of Threatened Species. Version 2022-2. https://www.iucnredlist.org. Accessed on 27 March 2025.
- [5] Calflora: Information on California plants for education, research and conservation, with data contributed by public and private institutions and individuals. [web application]. 2025. The Calflora Database [a non-profit organization]. Available: https://www.calflora.org/ (Accessed: 03/27/2025).
- [6] Calflora: Information on California plants for education, research and conservation, with data contributed by public and private institutions and individuals. [web application]. 2025. The Calflora Database [a non-profit organization]. Available: https://www.calflora.org/ (Accessed: 03/27/2025).