

# Mast-Trait

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## **Predator satiation**

- Dispersal mode: Animal-dispersed species may be more likely to mast, or the mechanisms behind masting could differ depending on dispersal mode.

This applies only to angiosperms, as 72/72 gymnosperm species are wind dispersed.  
Thus I look at this for angiosperms:

- Seed size: I have both seed weight and fruit size data. My hypothesis is that, among animal-dispersed species, larger-seeded species might be more prone to masting. Some studies have examined seed size alone and found no trend, but they may not have accounted for dispersal mode.
- Seed dormancy: Species with dormant seeds are expected to be more likely to mast.
- Nutrient content: I expect that species with more nutritious seeds are more likely to mast.

## **Pollination coupling**

- Pollination mode: Wind-pollinated species are expected to mast more frequently.
- Reproductive type: Monoecious species may be more likely to mast.
- Flowering period: Species with longer flowering periods may be more likely to mast.

## **Resource matching**

- Leaf longevity: Species with long-lived leaves are expected to mast more frequently, as longer leaf lifespan may facilitate greater resource storage.
- Drought tolerance: The relationship may go in either direction. Drought-intolerant species might be more sensitive to variation in resource availability, while drought-tolerant species may be better able to accumulate resources that support masting.