

SEED COLLECTION GUIDELINES

Ingrid Karklins January 2022

GENERAL GUIDELINES

- Only collect native plants in the wild.
- Do not collect from nursery-grown plants or cultivars, nativars or hybrids. These can be identified as named varieties ("Pride of Houston" yaupon) or with an "x" in the scientific name (Lantana x hybrida hybrid lantana).
- Do not collect from landscaped and/or private gardens.
- Do not collect on private lands without landowner's permission.
- Do not collect on City property, including parkland, without prior permission.
- Do not collect rare, endangered, or threatened species.
- Collect from numerous plants of the same species to enhance genetic diversity.
- Never strip a plant of seed. As a general rule, take no more than 10-20% of available seed.

HARVEST TIMING

Collect seeds at maturity, at the point of natural dispersal. Indicators that seeds are ready to harvest include:

- Seeds are full-sized and hard
- Seed coats are changing color usually from green to a darker hue
- Some seed capsules (if present) are opening

COLLECTING METHODS

You may want to wear gloves as protection from potential irritating compounds. Hand collection methods include plucking, stripping, raking, clipping, or shaking seed from plants. Seed on the ground can be old, moldy, infested with insects, or even from a different species and should not be collected. Inspect seed and their fruit/capsules/coverings for insect damage. This may indicate that much of the seed on the plant is not viable.

Place seed from individual collections in paper or well-aerated bags. Paper allows seeds to "breathe" whereas plastic will cause them to rot and mold.

Clearly mark bags with the following:

- Species name
- Collection location (GPS coordinates if possible)
- Date collected
- Name of collector

SEED PROCESSING

Remove seed from moist or soft tissue soon after collecting. Moisture in the pulp can lead to the development of mold and rot and can contain germination inhibitors. Remove attached structures and separate seeds from remaining flower heads, chaffy material, etc. The simplest method is to break apart seed coverings and pick seeds out by hand. Tools can include rubber mats, wood blocks covered with sandpaper or rubber, rolling pins, sieves, and wire screens. Particles from some seed can be irritants so it is recommended to wear a mask and gloves. If seeds are dense but excess material is light, a fan can be used to blow away unwanted chaff. Viability of oak and other nut species can be checked by placing in a bucket of water if all accessory structures have been removed. Viable seeds will sink to the bottom. Air dry seeds as needed prior to storage.

There is no need to scarify or abrade seed surfaces.

SEED STORAGE

Store away from direct sunlight in a well-ventilated location with stable, cool temperatures and low humidity. Protect from potential seed eaters such as birds, rodents and insects.

Do not keep seeds in unventilated plastic bags or containers. Both moisture and heat can build up in unventilated containers and cause seed to spoil and rot.

There is no need for any kind of stratification (cold treatment) since seeds will have a natural dormancy over the winter.

RECORD KEEPING

Document all seed collections on a spreadsheet. Recommended format is as follows:

Date collected	Scientific name	Common name	Collection location	Lat/Long	Collector	Quantity*	Storage location	Date planted	Planting location

*Quantity collected – can be measured as weight, seed count, "trace", etc.

REFERENCES AND FURTHER READING

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