

# Native edible plants to get you started



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# **Specialty Crops Program**

Promote native edible plants and other specialty crops in sustainable agriculture and increase awareness of their importance for conservation

## Disclaimer

- Be sure you know your plants before you eat them.
- As with any foods, there is a potential for allergic reactions when consuming native edibles.

# Gathering or Growing them

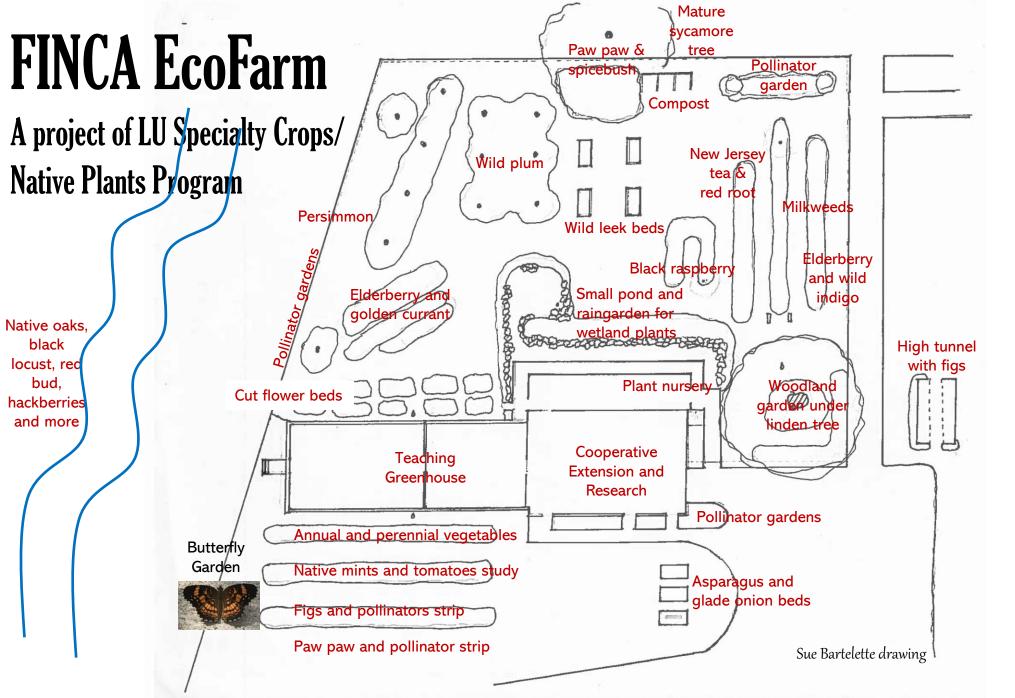
- Native edibles gathering should be done with permission from landowners.
- About public lands, different rules apply to different locations and different plants. Be sure you learn about them before doing any gathering.
- Try to grow your own

# Outline

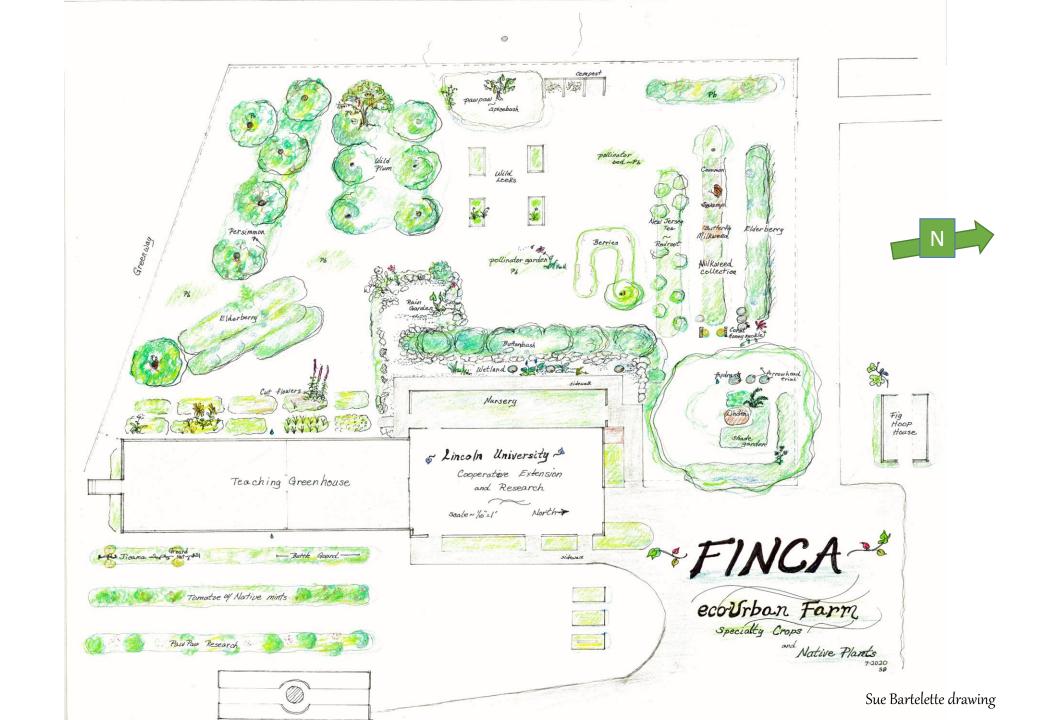
- The FINCA EcoFarm at Lincoln University
- Some native edible plants:

Herbaceous to woody edibles

- Perennial greens, fruits, tubers and flowers
- References









Workshops with hands-on training/volunteer opportunities

Native Plant Nursery





# Food tasting

Recipes are developed using native edibles



# Dining Wild

# Short list of Native Edibles grown at the FINCA EcoFarm on campus

Perennial greens, herbs, fruits, tubers and flowers



### What to eat?

#### Leaves and Stems

Wild onion
Wild leek
Common milkweed
Wood sorrel
Cattail
Goldenglow
Pokeweed (pokesalat)





Flowers
Common milkweed
Elderberry
Violets
Red bud
Bee balm
Passion fruit

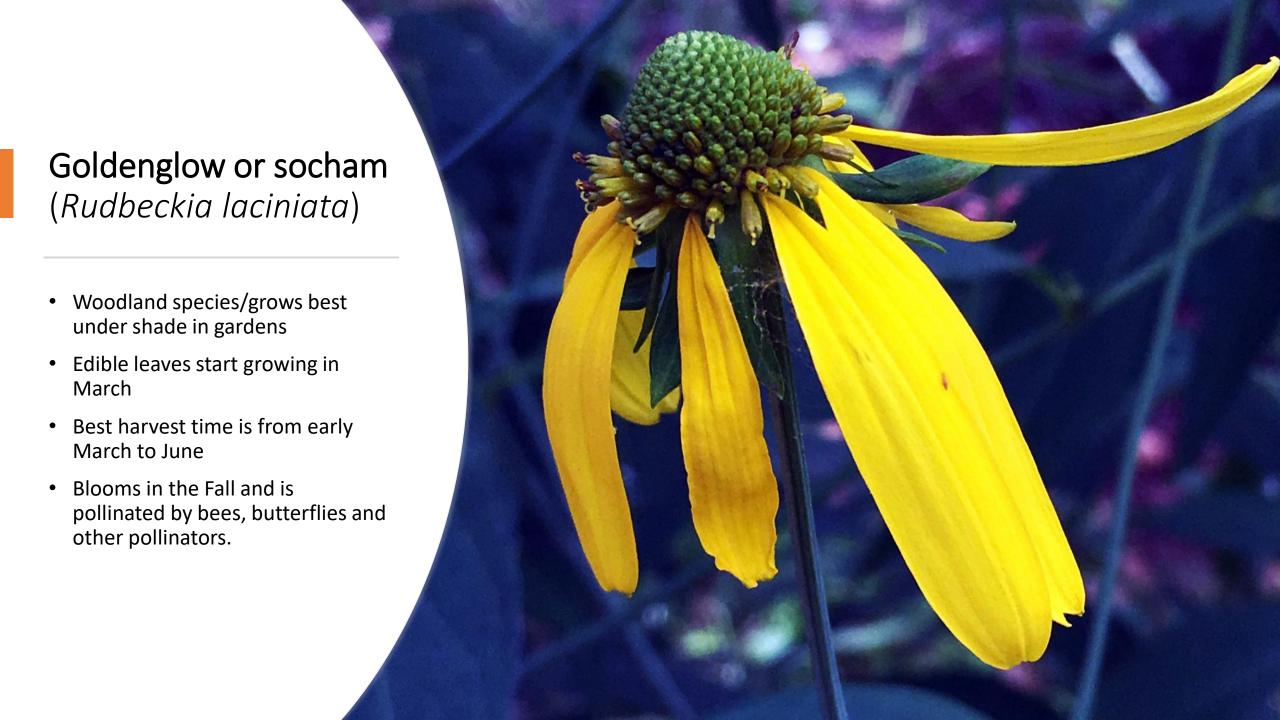
#### Fruits and seeds

Hog peanut
Wild plum
Wild strawberry
Prickly pear
Passion fruit
Persimmon
Aronia/chokeberry





Roots and
subterranean stems
Ground nut
Jerusalem artichoke
Lotus
Prairie turnip
Arrowhead (wapato)





This is how it looks in late winter or very early spring



Goldenglow in mid April. How to grow it? Seed or plant division

Leaves can be gathered in the spring and again in the fall.

Blanch before using in recipes calling for spinach or other greens









Goldenglow established at the Second Christian Church garden in Jefferson City, MO

- Community leader Patsy Galbreath-Johnson prepared a quiche with goldenglow during a workshop at the church
- These and other native plants were established with funds from a MPF garden grant.



Cup plant (Silphium perfoliatum)

- Sun to moderate shade
- Dry to moist soils
- Blooms in the summer
- Perennial
- Flower provides forage for bees, beetles, butterflies and wasps







# Cup plant

- Leaves are edible
- Harvest basal leaves in early spring
- Grows up to 6 ft. in the summer
- Propagated from seed or plant division

Gather leaves in the spring and blanch before using in recipes like soups, appetizers and even kimchee



Stinging nettle (*Urtica dioica*)

Woodland species/Shade to sun

Narrow-longer leaves

Opposite leaves

Considered native and introduced (USDA)

Urtica dioica ssp. gracilis native

U. dioica ssp. dioica

non-native.

Source: Flora or Missouri-Yatskievych







Nettles with wild leeks soup

### Salvadoran pupusas

- Corn flour tortillas filled with a mix of greens: nettles, cup plants and wild leeks
- An immersion of two cultures



# Native Onions



### Glade onion

- Early spring growth
- Growth best under full sun
- Grows well in raised beds and pots.



# Fall, glade or prairie onion *Allium stellatum*:

- Naturally grows in prairies and glades
- In gardens: dry, rocky sites and poor soils
- Bloom midsummer-fall
- Perennial
- Flower provides forage for bees, beetles and wasps
- Bulbs and leaves are edible





# Salad and appetizers with glade onion flowers for a subtle onion flavor





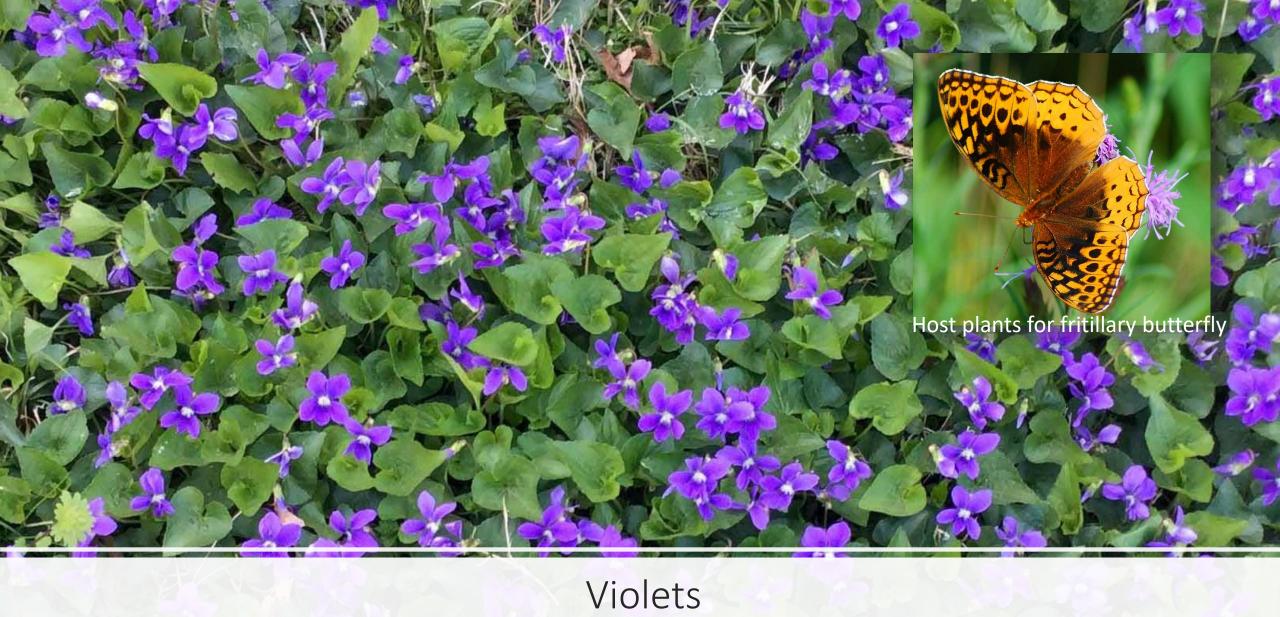
Woodland Spiderwort *Tradescantia ernestiana* 

- Moderate shade
- Average to moist soils
- Blooms in early spring
- Flower provides forage for bees, beetles and wasps
- Edible leaves and flowers



- Leaves can be gathered in the spring as mid-summer
- Leaves smooth and tender
- Add raw to salads











Red bud
(Cercis canadensis)





Pycnanthemum pilosum



Dittany (*Cunila origanoides*)

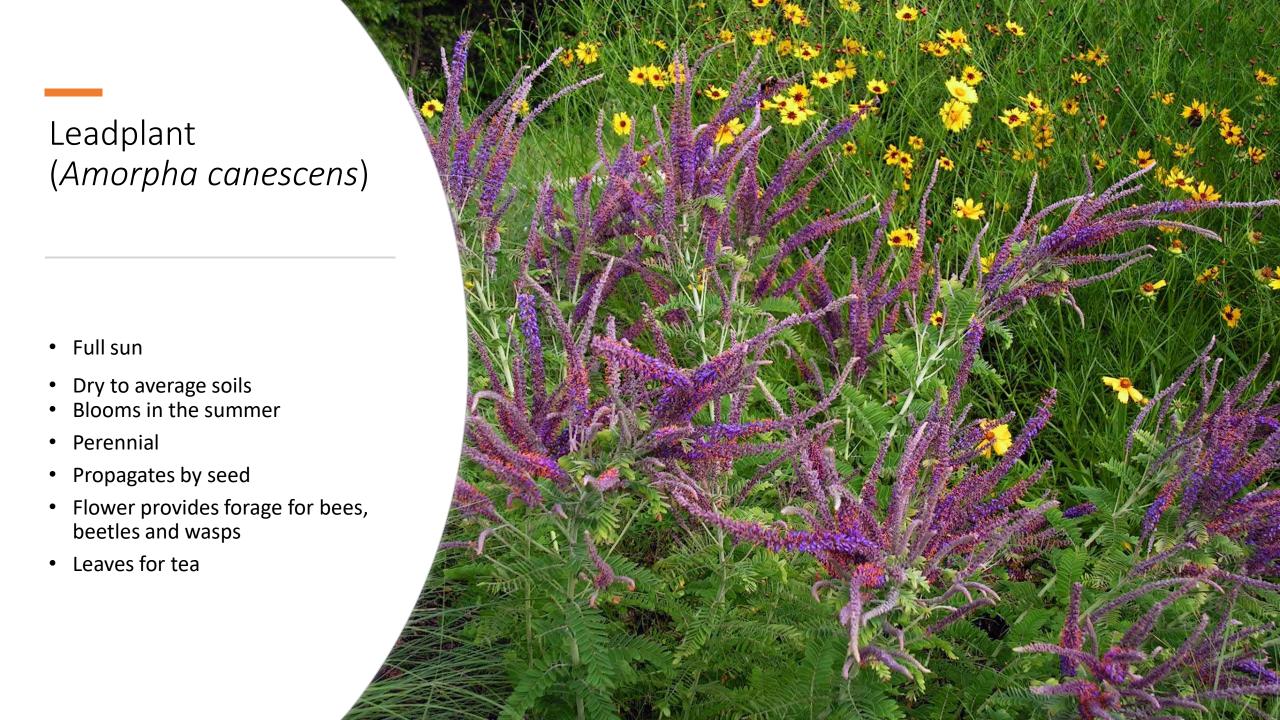
- Open woodlandsavanna/moderate shade
- Average to dry soils
- Perennial
- Starts growing in mid spring
- Blooms in the fall



Leaves used as a spice to replace oregano, gathered from spring to fall







It can be pruned in early summer to produce new leaves for better tea.

Leaves can be dehydrated for later use



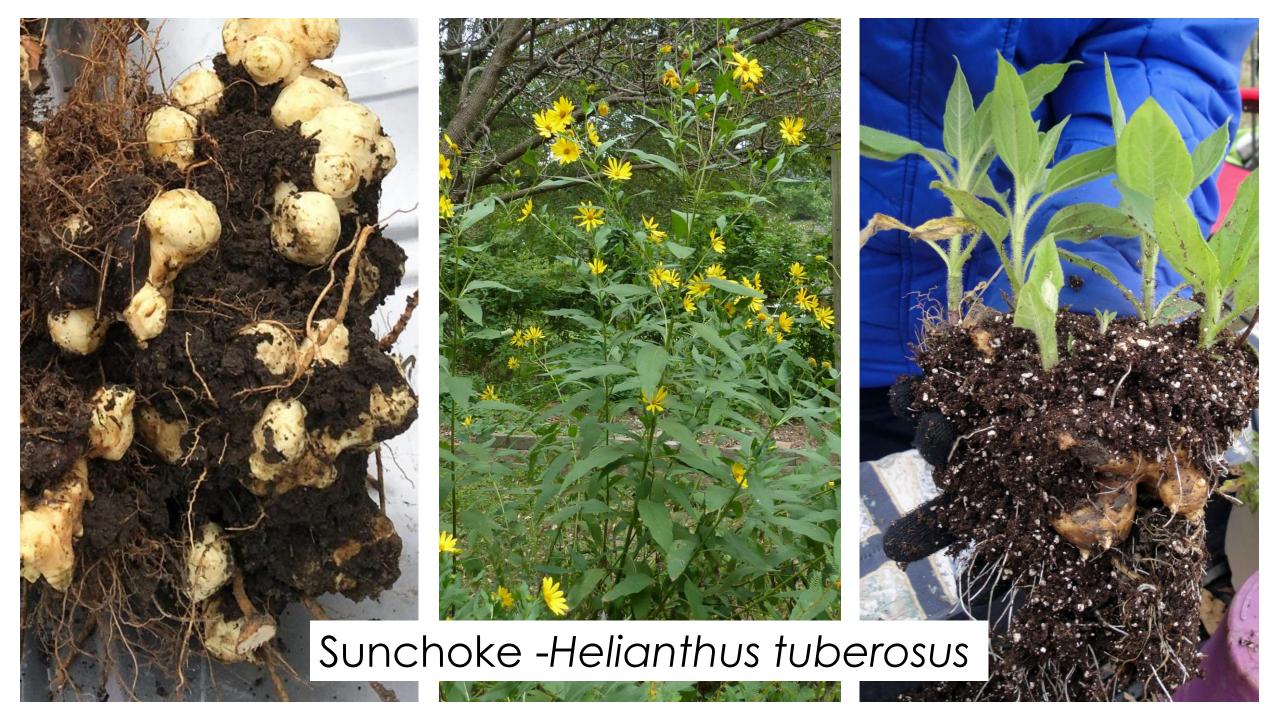
## 4-8 hours 95-115<sup>0</sup>F



Fresh or dry leaves can be steeped in warm water for 3 to 4 hours or overnight to prepare a concentrated tea.

From left to right: leadplant, mint and sumac teas







## Raw or cooked





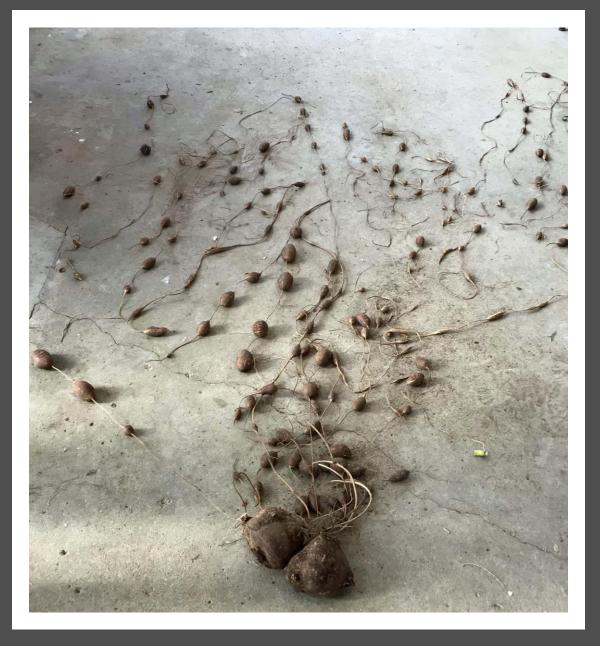


# Ground nut *Apios americana*

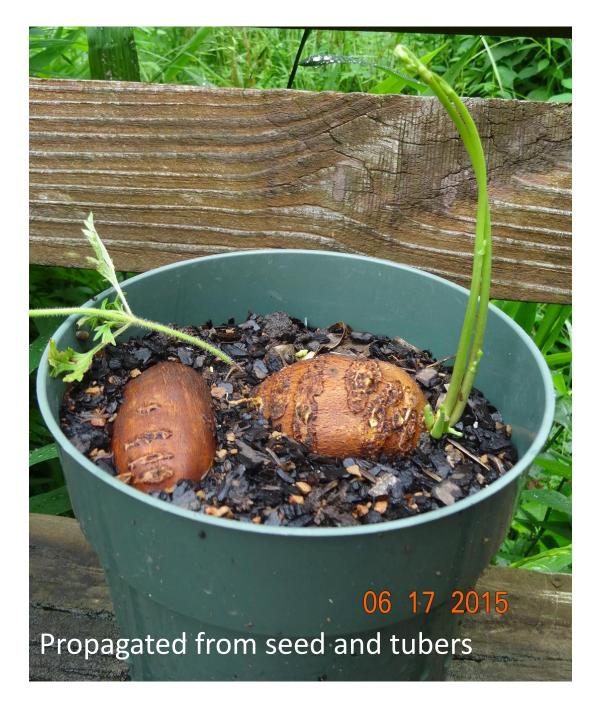
- Moist woodlands and bottomland thickets
- Nitrogen fixing legume
- Tubers harvested in the fall and winter

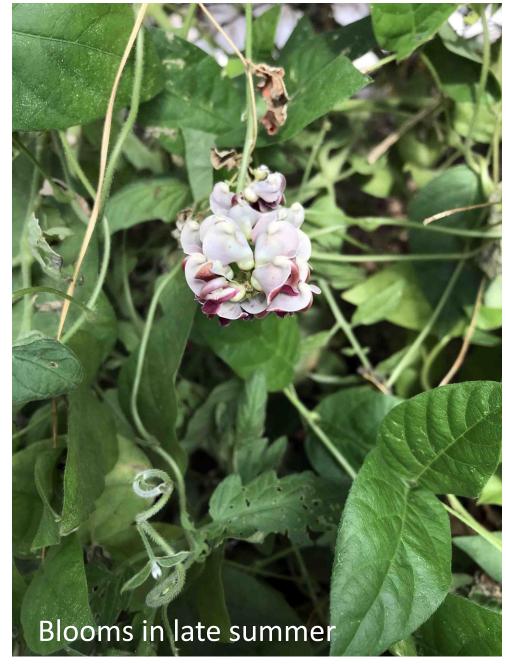


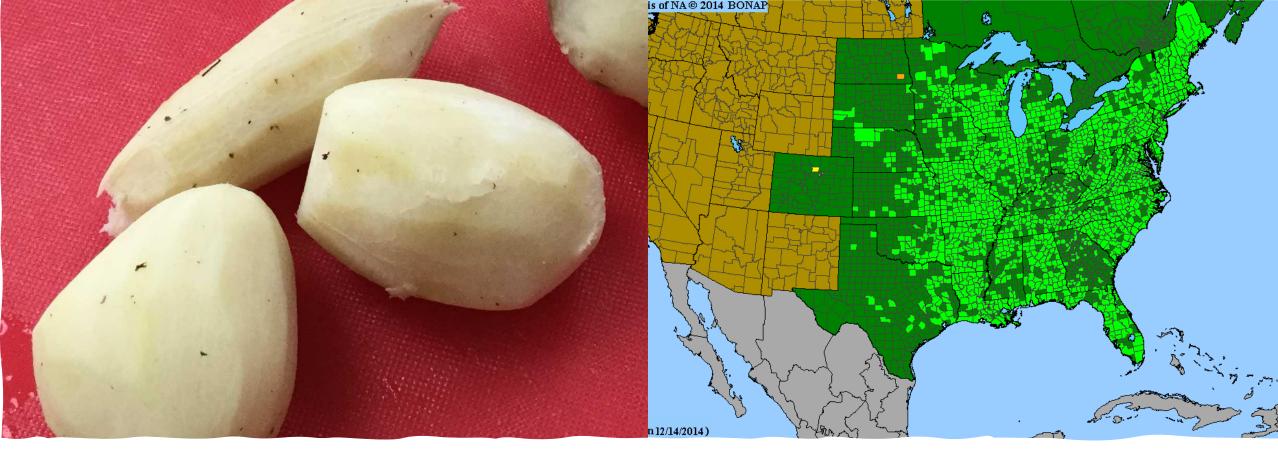




Tubers connected with thin rhizomes







Use in recipes calling for potatoes

Eastern and Central US and Canada





Arrowhead or wapato (Saggitaria latifolia)

Wetland species with edible tubers









American wild plum Prunus americana





Persimmon
-Diospyros virginiana-

Rich bottomlands

• Fencerows

• Open fields

Host plant of regal and luna moth





# Brewing persimmon to make wine

# Fruit can be dehydrated





# Persimmon cookies

https://grownative.org/project/nadia s-persimmon-cookies-withcranberries-and-pecans/



### Lincoln University Cooperative Extension • Native Plants Program

## Baking with Persimmons and Wild Berries

Here are some delicious recipes using edible fruits from Missouri Native Trees. Read more about the main ingredients following each recipe.

American Persimmon

All photos by Randy Tindall

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Cooperative Extension

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3/4 cup raisins

Enough milk to cover raisins

2 cups rice flour

1/2 teaspoon baking powder

2 teaspoons baking soda

11/2 teaspoons ground cinnamon 1/2 teaspoon ground nutmeg

1/2 teaspoon salt

11/2 cups pure cane sugar unbleached

3/4 cup melted butter (can substitute with Greek style vogurt)

3 eggs

11/4 cups persimmon pulp

2 teaspoons vanilla

11/2 cups non-hybrid Missouri pecans

1 Preheat oven to 350°F

2. In small saucepan over medium heat, bring raisins and milk to a boil. Remove from heat and let cool

3. In a medium bowl, mix melted butter, persimmon pulp, eggs, and vanilla. Set aside.

4. In a large bowl, mix dry ingredients. Add persimmon blend and gently stir. Fold in raisins with milk and the pecans.

5. Pour batter into a greased 10 inch diameter cake pan. Bake for 40 minutes or until a knife inserted into the cake out comes clean.

6. Remove from the oven. Let cool and flip over onto a plate. Cake can be frozen for a few months.

7. Top with Cream Cheese icing (above).



### Cream Cheese Icing

#### Ingredients

8 ounces cream cheese, softened

½ teaspoon vanilla

1 teaspoon fresh Meyer lemon juice

2 tablespoons honey

2 tablespoons powdered sugar

Mix all ingredients together and spread it onto the Persimmon Cake. Prepare one or two hours before serving.

## American Persimmon

(Dyospiros virginiana)

Medium sized tree, from 30 to 60 feet tall. Open crown and branched in deep soil conditions. Adapted to dry and low nutrient soils. It has pretty white flowers that look like waxy bells and are visited by native bees and other pollinators. Trees are dioecious (male and female flowers in different trees).

Persimmon can be easily reproduced from seed or cuttings. Once established, the taproot is long which makes it difficult to transplant. It is a slow- growing tree but reaches maturity three to five years after planting. It produces root suckers that can be mowed or pruned.

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### Baking with Persimmons and Wild Berries

Sweet Potato Cookies

## Sweet Potato Cookies with Wild Plum Jam

Number of servings: eight dozen (96) small cookies Ingredients

1 cup yogurt, Greek style

1 teaspoon butter

1 cup brown sugar

2 eggs

2 cups sweet potato, peeled, boiled and mashed (can substitute with 1 cup persimmon pulp and 1 cup mashed sweet potato)

2 cups whole wheat flour

1 teaspoon baking powder

1 teaspoon baking soda

1 teaspoon ground cinnamon

1 teaspoon ground nutmeg

1/2 teaspoon salt

1/2 cup native non-hybrid pecans

1/4 teaspoon minced crystallized ginger (optional)

1/4 cup wild plum jam (recipe follows)

1. Preheat oven to 350°F. Grease cookie sheets with Canola

2. Mix dry ingredients in a bowl. In a separate bowl, mix sugar, butter, vogurt, eggs and sweet potato. Add dry ingredients to this mix. Fold in crystallized nuts and ginger.

3. Drop dough by teaspoonfuls, one inch apart, onto cookie sheet. Drop 1/4 teaspoonful of wild plum jam on top of each cookie.

4. Cook for 10 to 15 minutes.

Cookies can be kept frozen in air-tight containers.

### Recipe for Wild Plum Jam

4 cups of wild plum pulp

4 cups of sugar

2 cinnamon sticks

1. Boil plums in water to loosen skin. Get the pulp using a tomato juicer.

2. Boil wild plum pulp with sugar and cinnamon sticks. Lower the temperature and let it simmer for an hour or so. Stir and check mixture constantly to avoid burning. Jam is ready when it sticks to wooden spoon.

#### Wild Plum (Prunus americana)



Fresh Wild Plums

Shrub or a small tree. It spreads from roots and may form thickets. Suckers can be controlled with fire or mowing. The fragrant flowers are in clusters with five white petals. The leaves are alternate, ovate, with long-pointed tips. The fruit is red to yellow and ball-shaped (1" diameter). It grows in full to partial sunlight on fertile loamy

soil to marginal soils. It can be found along wooded areas. fence rows and pastures. It can be propagated from seed or

Wild plum provides food and cover for wildlife. It is consumed by quail and many other songbirds and mammals.

It is used to produce superb jellies and other preserves.

The edible fruit matures from July to September. It can be consumed raw or cooked

### Persimmon (continued from page one)

Fruit is edible and matures in the fall. A good rule of thumb is to gather persimmons that have fallen to the ground to be sure they are ripe. Immature fruits are not at all pleasant. It can be eaten fresh or used for jams, in baked goodies and for wine.

Dehydrated persimmons are a good source of carbohydrates, dietary fiber, iron, calcium, vitamin A and protein. To dehydrate persimmons, cut them in half and dry them in a dehydrator overnight at 130-140°F.









# Paw paw (Asimina triloba)

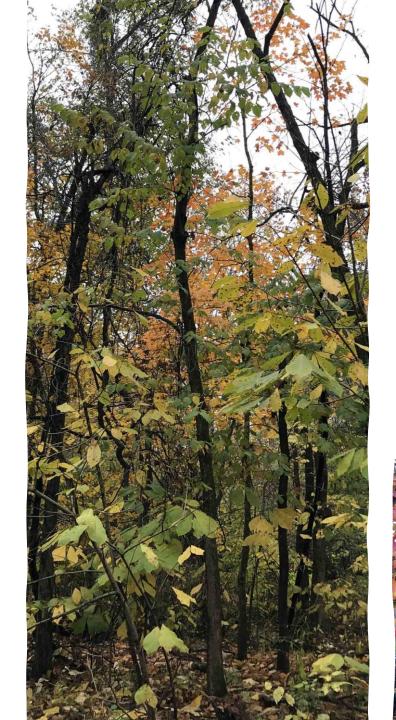
- Edible fruits/largest fruit in NA.
- Eat fresh or use to prepare ice cream and desserts





When to harvest?
From late fall to early winter in Missouri

Paw paws in nature and in gardens







Paw paws are host plants for zebra swallowtail butterfly



## Cooking with acorns

When to harvest? When they fall from the trees

Store in a dry and cool place before processing

Acorns are eaten by weevils/900 species of Lepidoptera feed on oaks 'Dr. Doug Tallamy'

White oak acorns are sweeter, they had less tannins than red oak acorns



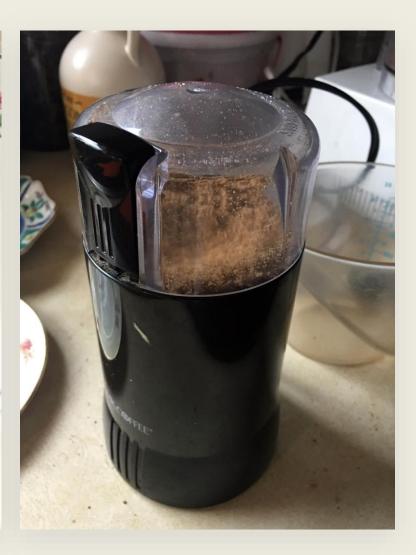
To remove tannins leaching is necessary.

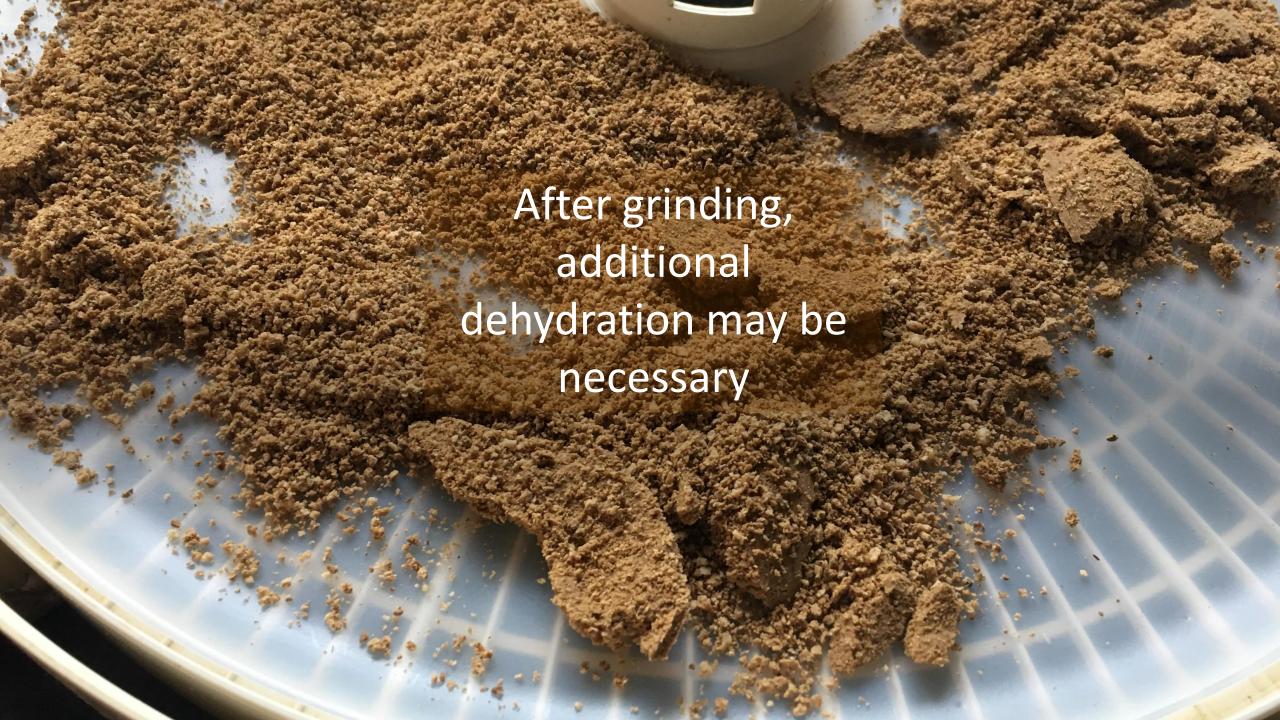


# Free of tannins acorn pieces can be ground









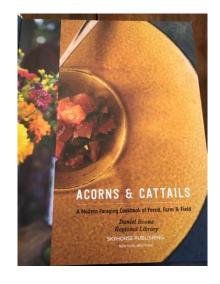


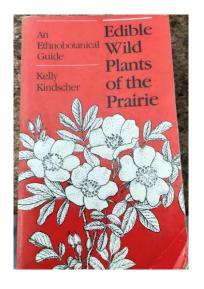
## Sweet cheese bread Salvadoran quesadilla Flavored with acorn flour

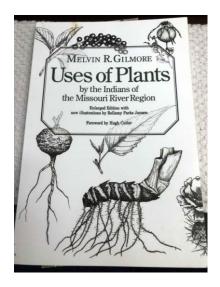
For recipe and article about processing acorns https://grownative.org/project/acorn-flour-salvadoran-quesadilla/

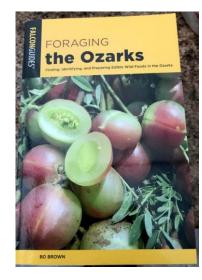
## Selected books

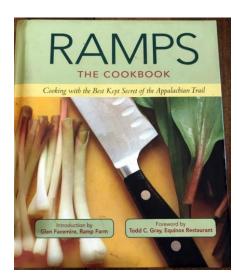


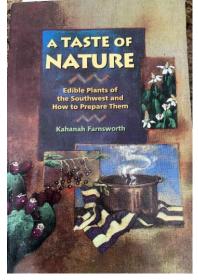


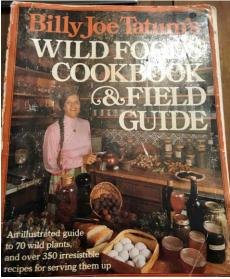


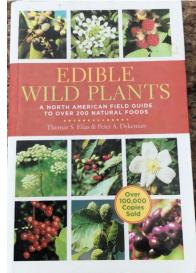


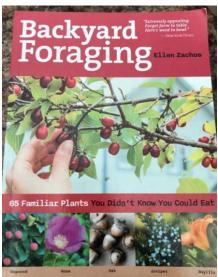












## References

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- Tallamy, D. 2020. The nature of oaks.
- United States Northern Plains Native American plant foods.
   J. of Food and Analyses 34(2014) 136-152.
- USDA Food Data Central. https://fdc.nal.usda.gov/

## Links

- Baking with persimmon and wild berries:
- <a href="https://www.lincolnu.edu/c/document\_library/get\_file?uui">https://www.lincolnu.edu/c/document\_library/get\_file?uui</a> d=34671c05-2476-4b65-80be-d738de320acf&groupId=21399
- <a href="https://grownative.org/project/acorn-flour-salvadoran-quesadilla/">https://grownative.org/project/acorn-flour-salvadoran-quesadilla/</a>
- https://grownative.org/project/nadias-persimmon-cookieswith-cranberries-and-pecans/
- <a href="https://grownative.org/learn/natives-for-gardening/native-edibles/">https://grownative.org/learn/natives-for-gardening/native-edibles/</a>
- <a href="https://grownative.org/project/mountain-mint-chocolate-chip-cheesecake/">https://grownative.org/project/mountain-mint-chocolate-chip-cheesecake/</a>
- https://orionmagazine.org/article/stalking-the-wildgroundnut/

