

Chinese tallow (*Triadica sebifera*)

EUPHORBIACEAE FAMILY



GROWTH HABIT

Chinese tallow (*Triadica sebifera*) is a small deciduous tree with milky sap. This tree grows up to ~50 feet and frequently produces suckers. **Flowering** occurs from April to June and fruits ripen from August to November. **Leaves** are simple, alternate, 1 to 2.5 inches wide with broadly rounded bases that taper to a slender point. **Flowers** are small and yellow borne on spikes up to 8 inches long. **Fruits** are 0.5 inch wide capsules that turn from green to dark brown after maturity. Each fruit contains ~3 seeds. **Seeds** are white and waxy from 0.4 to 0.7 cm. Large trees can produce up to 100,000 seeds.

DISTRIBUTION IN FLORIDA

Found in most counties but is less abundant in South Florida.

Table 1. Herbicide options for Chinese tallow.
Herbicides are expressed on a (% v/v) by product basis.
The label is the law. Always refer to product label before use.

HERBICIDE ACTIVE INGREDIENTS	PRODUCT(S)	-----Recommended Approach-----			
		FOLIAR	BASAL BARK	CUT STUMP	REDUCED HACK & SQUIRT
AMINOPYRALID	MILESTONE	NR	NR	10%	NR
TRICLOPYR ANIME	GARLON 3A OR RENOVATE	NR	NR	50%	NR
TRICLOPYR ESTER	GARLON 4	NR	20%	20-30%	NR
TRICLOPYR ESTER	PATHFINDER II	NR	100%	NR	NR
IMAZAPYR	HABITAT OR ARSENAL	0.5-0.75%	6-9%	10%	NR
TRICLOPYR ACID	TRYCERA	NR	20%	NR	NR
IMAZAPYR	STALKER (ADDITION)	NR	3%	NR	NR
IMAZAMOX	CLEARCAST	2%	NR	50%	NR
AMINOCYCLOPYRACHLOR	METHOD	0.5%	NR	10%	50%

NR= Not Recommended
¹ Tank mix partner to reduce root suckering

NOTES SECTION

Herbicide Notes for Chinese tallow:

- Always consult the herbicide label for specific concentration recommendations. For all herbicides, foliar treatments are most effective on seedlings and small saplings.
- General basal bark concentration is 20% for triclopyr products. However, many trees may resprout from lateral roots following this treatment. Addition of stalker 3% will reduce resprouting on older trees.
- Cut stump is labor intensive and may not always prevent stump sprouting. It will also not control all lateral root sprouts originating away from the trunks.
- Reduced hack and squirt concentrations for Method are 50-100%. This technique is extremely effective when 1 ml of a 50% solution is applied to one hack for every 4 inches of stem diameter. There will be little to no resprouting when this treatment is applied.

Adjuvant Considerations: Surfactants are often required for foliar treatments to improve herbicide absorption. For imazamox and imazapyr, a methylated seed oil is recommended.

Seasonality of Treatments: Treatments are generally most effective during summer and fall. Avoid treatments in the later winter and spring when upward sap flow makes all treatment types less effective.

Specific Hydrologic Considerations: Imazamox, imazapyr, and all triclopyr formulations except triclopyr ester are labeled for use when standing water is present. For basal bark application, only Trycera can be used when Chinese tallowtree is in standing water. For reduced hack and squirt, Method is fully labeled for use in uplands and seasonally dry wetlands but not when standing water is present.

Specific Considerations for each Herbicide for Potential Non-Target Damage:

- Aminocyclopyrachlor may injure or kill cypress, beautyberry and several other trees, shrubs and forbs. While it is safe to apply under oaks, it is still generally recommended for IPT only.
- Imazapyr may injure or kill many other species and should not be used near desirable vegetation, especially oaks.
- Triclopyr ester may be volatile at temps > 85 F.
- Imazamox is the most selective treatment for foliar applications and can be safely applied over mixed stands of tallowtree and oaks.
- Although labeled for use in aquatics, Trycera should be used carefully as a basal bark treatment when standing water is present to avoid in water activity.

Retreatment Interval Consideration: Chinese tallowtree seed remain viable for at least two years and up to seven. Seedling recruitment often occurs over the spring and summer. Trees typically begin producing viable seed in year three. Given these factors, it is important to get the site on a three year monitoring/treatment rotation to prevent reinfestation.

Calculations for % v/v:
(Volumes must be in the same units, i.e., gallons, ounces, liters, etc).

$$\% \text{ v/v} = (\text{Volume of herbicide product} / \text{total herbicide plus carrier volume}) * 100\%$$

Reference Table for % v/v

% V/V	Ounces of herbicide to add for 1 gallon (128 oz) total mix size
0.25	0.32
0.5	0.64
1.0	1.28
2.0	2.56
5.0	6.4
10.0	12.8
20.0	25.6