



Weed Management in Apples ¹

Jeffrey G. Williamson²

The following table contains information on chemical weed control for apples grown in Florida. Always read and follow all label directions carefully and exactly when applying any pesticide. Soil types and possible crop injury from herbicides vary greatly throughout Florida. Do not apply a herbicide to an inappropriate soil type even if the herbicide is labeled for that crop. See Table 1.

1. This document is HS88, one of a series of the Department of Horticultural Sciences, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date: 1994. Revised: November, 2007. Please visit the EDIS Web site at <http://edis.ifas.ufl.edu>.

2. Jeffrey G. Williamson, professor, Horticultural Sciences Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.

Table 1. Chemical Weed Control in Apples.

Pre-emergence		
Common name Trade name	Pounds active ingredient per acre	Time of application
Dichlorbenil (Casoron 4G)	4 to 6	Apply in January or February , but no sooner than 4 weeks after transplanting.
Weeds Controlled and Remarks: Annual and perennial grasses and broadleaf weeds. Use higher rate for control of perennial weeds. May be used on bearing, nonbearing and nursery stock.		
(Diuron, Karmex DF or XP) 80 WDG	1.6 to 3.2	In the spring. March through May, on trees established at least one year in orchard.
Weeds Controlled and Remarks: Annual broadleaf weeds, annual grasses and perennial weed seedlings. Use and rate depend on soil texture and organic matter. Do not use on sand, loamy sand, gravelly soils, or exposed subsoils, nor where organic matter is less than 1%. See label for additional use restrictions based on soil type. Use only under trees established at least 1 year in the orchard. Best results occur when rainfall occurs within 2 weeks of application. Do not treat varieties grafted on full-dwarf rootstocks.		
Flumioxazin (Chateau) 51 WDG	0.19 to 0.38	Newly planted and established trees.
Weeds Controlled and Remarks: Use shielded sprayer on trees established for less than one year. May be tank mixed with a labeled burn down herbicide for control of emerged weeds. Do not exceed 6 oz per acre to trees planted less than 3 years in soil with a sand and/or gravel content exceeding 80%. Do not harvest fruit within 60 days of application. Do not tank mix with Glyphosate or 2, 4 -D Amime after trees break dormancy.		
Oryzalin (Surflan) 4AS	2 to 4	Allow soil to settle around newly planted trees.
Weeds Controlled and Remarks: Annual grasses and broadleaf weeds. Only 1 application per year. Existing vegetation should be tilled prior to application or destroyed by a contact herbicide. Sprinkler irrigate or use shallow cultivation if a single 1/2-1" rain does not occur within 21 days of application. May be tank mixed with certain other pre and post-emergence herbicides (see label).		
Oxyfluorfen (Goal 2 XL or OxiFlo) 2EC (Galigan) 2E (GoalTender) 4E	1.25 to 2	Apply to dormant trees until just before budswell. Do not apply when foliage or fruit are present.
Weeds Controlled and Remarks: Controls annual broadleaf and some grass weeds. Avoid direct contact with crop plant. May be tank mixed with certain other pre and pos-emergence herbicides (see label).		
Pendimethalin (Prowl H ₂ O) 4AS	2 to 4	Do not apply to newly planted trees until soil has settled around roots.
Weeds Controlled and Remarks: Most effective when adequate irrigation or rainfall occurs within 7 days following application. Can be applied with paraquat for control of emerged weeds. Do not apply within 60 days of harvest.		

Table 1. Chemical Weed Control in Apples.

Common name Trade name	Pounds active ingredient per acre	Time of application
Simazine (Princep, Simazine) 4L WDG	2 to 4	Apply in late fall to early spring prior to weed emergence.
Weeds Controlled and Remarks: Controls certain annual grasses and broadleaf weeds. Trees must be established at least 1 year. Avoid contact with fruit, foliage or stems. Do not allow animals to graze treated areas. Do not use on sand, loamy sand, or gravelly soils.		
Terbacil (Sinbar) 80 WP	1.6 to 3.2	Apply either in the spring or after harvest in the fall before weeds emerge or during early seedling stage of weed growth. Use only on trees that have been established for 3 or more years.
Weeds Controlled and Remarks: Certain annual grasses and broadleaf weeds with partial control of perennials at higher rates. Use only under trees established in the orchard for at least 3 years. Use and amount of product used will vary according to soil texture and organic matter. Do not use on sand, loamy sand, or gravelly soils nor soils with less than 1 percent organic matter (see label). If dense weed growth is present at application remove tops and then treat the ground. Best results are obtained if moisture is supplied within 2 weeks. Do not replant treated areas to any crop within 2 years after last application. Do not use on eroded areas, nor on unhealthy trees or on trees under certain irrigation regimes. Prevent drift and spray from contacting desirable plants.		
Oryzalin (Oryzalin, Surflan) 4AS + Simazine (Princep, Simazine) 4L WDG	2 to 4 + 2 to 4	See label for directions.
Weeds Controlled and Remarks: Can be used in combination with certain post-emergence herbicides to control existing weeds.		
Post-emergence		
Common name Trade name	Pounds active ingredient per acre	Time of application
Carfentrazone-ethyl (Aim) 2EC	0.008 to 0.031	Best results when applied to weeds that are in the 2-3 leaf stage.
Weeds Controlled and Remarks: Apply with at a minimum spray volume of 20 gpa. Do not allow contact of spray with green bark, or desirable foliage flowers or fruit of the crop. Do not harvest fruit within 7 days of application. Use with a nonionic surfactant or crop oil concentrate (see label).		
Glufosinate (Rely) 1SL	0.75 to 1.5	Do not apply to trees planted in the orchard for less than one year.
Weeds Controlled and Remarks: Do not allow spray to contact green bark or foliage. Apply with a minimum spray volume of 20 gpa. Control of perennial weeds may require repeat applications. Can be tank-mixed with certain pre-emergence herbicides (see label).		

Table 1. Chemical Weed Control in Apples.

Common name Trade name	Pounds active ingredient per acre	Time of application
Glyphosate (Roundup) (Touchdown) (several other formulations available)	1 to 2	See label
Weeds Controlled and Remarks: Postemergence activity only. Damages all green tissue contacted. Has no effective residual activity. Rate used depends on weed species to be controlled. Avoid contact of spray, drift, or mist with foliage, green bark, or bark of trees established less than 2 years, suckers or fruit of desirable trees, crops, plants or other desirable vegetation. See label for restrictions on application equipment.		
Paraquat (various)	0.6 to 1	Apply to weeds when succulent and new growth is 1-6" high.
Weeds Controlled and Remarks: Controls most annual grasses and broadleaf weeds. Perennial weeds are desiccated. Use a non-ionic surfactant (see label). Do not allow spray to contact green stems, fruit or foliage. Do not spray under windy conditions and use a shield for young trees. Do not graze on treated areas.		
Sethoxydim (Poast) 1.5 EC	0.19 to 0.47	Apply to actively growing, non-stressed, grasses. Do not harvest within 14 days of treatment.
Weeds Controlled and Remarks: Controls annual and perennial grasses. Multiple applications may be required for control of some perennial grasses. Do not exceed 7.5 pt. per acre per year. see label for optimum growth stage and size of weeds to be treated.		
Post-emergence - non -bearing only		
Common name Trade name	Pounds active ingredient per acre	Time of application
Clethodim (Arrow) 2EC (Intensity) 1EC (Select) 2EC	0.094 to 0.125	Treat actively growing, non-stressed, grasses. Use only on non-bearing trees.
Weeds Controlled and Remarks: Controls annual and perennial grasses. Multiple applications may be needed to control some perennial grasses. See labels for use of nonionic surfactants or concentrated crop oils.		
Fluazifop-butyl (Fusilade DX) 2EC	0.125 to 0.38	Nonbearing trees only. Apply to actively growing, nonstressed grasses before they are at a specific growth stage.
Weeds Controlled and Remarks: Certain annual and perennial grasses. Use with a crop oil or non-ionic surfactant (see label). May be used for site preparation. Apply to nonbearing trees only.		