Stop #9: Kurapia! A New and Improved Groundcover for Drought and Saline Conditions

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What is Kurapia?

Kurapia is a low-growing, herbaceous, perennial groundcover belonging to the Verbanaceae or Verbena family. The species [*Phyla (Lippia) nodiflora* (L.) E. Greene] is native or naturalized to California, but is considered invasive. Kurapia is a sterile/non-invasive and cold hardy cultivar selected and developed in Japan, and demonstrates superior landscape performance as compared to the existing species. Kurapia's dense canopy and deep root system provide excellent drought tolerance and soil stabilization, even on steep slopes. It is tolerant of a wide range of soil types and soil conditions, including salinity.

Kurapia reaches a maximum height of 2-3" tall and produces numerous small, white flowers from spring to late summer, which can attract many bees. Mowing is not required. However, regular mowing with a rotary mower as low as 2 inches can be used to minimize flowering and resulting bee populations. Kurapia can tolerate partial shade and light foot traffic when maintained either non-mowed or mowed similar to a lawn, but is not recommended for use under intensive, concentrated foot traffic.

Kurapia is adapted to USDA climate zones of 7b and higher. In regions where average daily temperatures remain above 45F, Kurapia will stay evergreen throughout winter; however, growth will gradually decrease and enter semi-dormancy when average daily temperatures fall to around 38F. Kurapia has been known to survive temperatures as low as 20F. These temperatures are provided as estimates, as Kurapia greenness, dormancy, and survival will depend upon specific location and environmental factors.

Kurapia Planting and Maintenance

Kurapia is available in greenhouse flats containing 72 plugs, or as sod. Recommended plug spacing for Kurapia is 18" on center. Fastest establishment of plugs in most California climates is from March through September, depending on location and weather patterns in a given year. Excessively cold temperatures in winter or hot temperatures in summer can slow rate of establishment. Complete establishment of Kurapia plugs usually occurs within 3 to 4 months from planting, depending upon plug spacing and growing conditions.

Although Kurapia is tolerant of drought and low water conditions, the establishment period is not the time to withhold water. Once fully established, research at UCR

has demonstrated that mature Kurapia can be maintained similar to warm-season turfgrasses at 40-60% replacement of reference evapotranspiration (ET_o) in warmer inland climates and <40% in cooler, coastal regions during the growing season. Irrigation usually is not necessary during winter semi-dormancy, which is typically accompanied by rainfall in California. Weekly or bi-weekly irrigation should suffice during the growing season, except during periods of high temperatures and low humidity.

Fertilization of Kurapia is most important during establishment to expedite cover. Once full coverage is achieved, subsequent fertilization is likely not needed. Weed control is best accomplished prior to planting Kurapia. After planting plugs and rooting of sod, application of a preemergence herbicide is the best and safest method of controlling weeds. As previously stated, Kurapia is a sterile cultivar of *Phyla* (*Lippia*) *nodiflora*, which is naturalized in California. Because Lippia is considered a minor plant in the horticultural industry, this species is not likely to be found on herbicide labels. However, provided they are safe, herbicides labeled for use on groundcovers or ornamentals can be used on Kurapia. Please see the following page for further herbicide recommendations. Aside from mowing, lateral spread of Kurapia may need to be controlled with mechanical (edge trimmer) or chemical (non-selective herbicide) trimming.

Where to Buy?

Kurapia plugs can be purchased from Florasourceltd.com, EcoTechServices.net, or ArmstrongGrowers.com. For sod, contact DeltaBluegrass.com or WestCoastTurf.com. For general information, please visit Kurapia.com.

KURAPIA®
Utility Groundcover

Herbicide Tolerance Guidelines

Product Tested	Common Name	Timing and Target Weed	Rate Tested	Safety Planting	Safety Maturity
Barricade 65WG	Prodiamine	PRE grass/broad	2.3 lb/A	T	T
Pennant Magnum	Metolachlor	PRE grass/broad/sedge	32 oz/A	T	T
Gallery 75DF	Isoxaben	PRE broad	1.3 lb/A	I	I
Specticle FLO	Indaziflam	PRE grass/broad	9 oz/A	S	S
Fusilade II	Fluazifop	POST grass	24 oz/A	T	T
Sedgehammer	Halosulfuron	POST sedge	1.3 oz/A	S	S
Certainty	Sulfosulfuron	POST grass/broad/sedge	1.25 oz/A	I	I
Tenacity	Mesotrione	POST grass/broad	5 oz/A	S	I
Tribute Total	Thiencarbazone + Foramsulfuron + Halosulfuron	POST grass/broad/sedge	3 oz/A	S	S
Celsius	Thiencarbazone + Iodosulfuron + Dicamba	POST broad/grass	4.5 oz/A	S	I
Drive XLR8	Quinclorac	POST broad/grass	64 oz/A	S	I
Turflon Ester Ultra	Triclopyr	POST broad	32 oz/A	S	S
Lontrel	Clopyralid	POST broad	11 oz/A	I	I
Speedzone Southern	2,4D + MCPP + dicamba + carfentrazone	POST broad	64 oz/A	S	S
Mecomec 4	MCPP	POST broad	64 oz/A	I	I

Products tested at California Polytechnic State University, San Luis Obispo (Los Osos loam; plant hardiness zone 9b) and University of California, Riverside (Hanford fine sandy loam; plant hardiness zone 9b) on newly planted Kurapia plugs (March 2015) and mature Kurapia (12 weeks after planting).

T = Tolerant at rate tested with minimal or no injury. For PRE herbicides, sequential applications of lower rates would further maximize weed control and safety to Kurapia.
I = Intermediate tolerance at rate tested. Typically, injury to Kurapia followed by recovery. Sequential applications of lower rates recommended and/or testing first on small area before broadcast application.
S = Sensitive at rate tested with severe injury, slow recovery/spread, or death.

The information provided is for educational purposes only. The user assumes all risks and liability for herbicide use. Not all products or formulations could be tested in one experiment. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the universities is implied. Always read and follow the label of the product(s) being used.

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