Establishment Protocols for Pili Grass On Roadside Areas

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1. Site preparation for native plants on roadways
2. Stages of Pili grass establishment w/seeds
3. Website viewing tips for reviewing this seminar on-line at http://www.ctahr.hawaii.edu/deFrankJ/
Recommendations for all new DOT contracts involving native plant installations on roadways

1. Include 6-9 months dedicated to weed eradication
2. Induce multiple weed flushes with irrigation, deep soil wetting essential
3. Kill weeds with mixture of systemic herbicides for both grass, broadleaf and sedge plants
4. Anticipate 3-5 spray applications
5. Why?
With new DOT contracts awarded, contractors should prepare for Rainfall that provides activation of weedy ground covers prior to irrigation installation.
Temporary irrigation w/poly pipe – tips for blowout proof connections
Dual irrigation system- temp. overhead and permanent surface drip
Recommendations for all DOT contracts
For large scale establishment on roadways

1. Protocol for Pili grass starts after weed eradication period, 3 phase approach

2. Phase 1: drop seed on drip line and cover w/hydro-mulch cap

3. Phase 2: fertilize and mow – develop enhanced plant structure for seed production

4. Phase 3: seed laden mulch used to populate between row space
Phase 1: drop seed on drip line and cap
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1/2 lbs./100 linear ft – at least 2 live seed per linear foot
Phase 1: drop seed on drip line and cap
Phase 1: drop seed on drip line and cap – Pili grass seedling 2-wks
Phase 1: drop seed on drip line and cap

Use hydro mulch applicator to apply pre-herbicide to between row space
Apply Ronstar 50 WP 2.5 lbs./a
Phase 1: drop seed on drip line and cap
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Recommendations for all DOT contracts
For large scale establishment on roadways

1. Protocol for Pili grass starts after weed eradication period, 3 phase approach
2. Phase 1: drop seed on drip line and cap
3. Phase 2: fertilize and mow – develop enhanced plant structure for seed production
4. Phase 3: seed laden mulch to populate between row space
Phase 2: fertilize and mow develops plant structure for seed production
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Cutting Pili grass too short results in some stem death and loss in vigor.
Phase 2: fertilize and mow develops plant structure for seed production
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1. Protocol for Pili grass starts after weed eradication period, 3 phase approach
2. Phase 1: drop seed on drip line and cap
3. Phase 2: fertilize and mow develops plant structure for seed production
4. Phase 3: seed laden mulch to populate between row space
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Color turns from light green to brown
Mature seeds heads moved to b/w row space
Phase 3: seed laden mulch to populate between row space
Phase 2: fertilize and mow develops plant structure for seed production

Phase 3: seed laden mulch to populate between row space
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Recommendations for all DOT contracts
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1. Protocol for Pili grass starts after weed eradication period
2. Permanent drip irrigation lines for establishment and long term persistence
3. Assuming a shortage of seed for broadcast establishment, 3 phase approach
4. Drop seed & cap, mowing to develop seeding plant structure, seed laden mulch for b/w spaces
For more information on topics covered

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For more information on topics covered

http://www.ctahr.hawaii.edu/deFrankJ/index.htm

Web based resources for weed I.D. and control, problems weeds in warm season turf & Purple nutsedge control for gardens and ornamental nursery beds. (posted 10/16/2012)
Weed control recommendations-home turf, landscapes and gardens (posted 06/01/2012)
Weed control in Aiea ball field, Waipio Soccer Field issues and new rules for Aquatic weed control - CPS 12th Annual Seminar and Tradeshow (posted 05/22/2012)
Weed control update for warm season turf in Hawaii - Pacifica Ag. Tradeshow (posted: 01/19/2012)
Weed control Considerations for Potted Tropical Ornamentals and Turf (posted: 02/09/2011)
Aiea Baseball field weed cleanup - 2010 (posted: 03/31/2011)
Pili Grass as a Living Mulch in Tropical Vegetable Crop Production in Hawaii 2009.
Weed Control in Native Hawaiian Plants
Native Plants on Hawaii’s Roadways
Restoring Native Habitats in Hawaii
Student presentations for Weed Science Lab, TPSS/PEPS 481
Herbicide and Growth Regulator Studies in Potted Ornamentals 2005 to 2007
Non-Weed Control Presentations (posted 06/21/2011)
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