R. David Myers
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Orchardgrass, Tall Fescue & Ladino Clover
Cool Season Grass/Clover Trial
CMREC, Upper Marlboro
Prince George's County, Maryland

**Map Unit Description**

**A6B**
Adelphia-Holmdel complex, 2 to 5 percent slopes
0.4 acres, 2.1% of AOI

**A6B**
Annapolis fine sandy loam, 2 to 5 percent slopes
7.5 acres, 43.0% of AOI

**A6C**
Annapolis fine sandy loam, 5 to 10 percent slopes
3.6 acres, 20.9% of AOI

**CnE**
Collington-Wist complex, 15 to 25 percent slopes
2.8 acres, 16.3% of AOI

**CnF**
Collington-Wist complex, 25 to 40 percent slopes
1.7 acres, 9.6% of AOI

**DnA**
Donalton fine sandy loam, 0 to 2 percent slopes
0.1 acres, 0.4% of AOI

**DnB**
Donalton fine sandy loam, 2 to 5 percent slopes
1.4 acres, 7.8% of AOI

**Totals for Area of Interest**
17.4 acres, 100.0% of AOI

**Map Unit Setting**
- Elevation: 0 to 230 feet
- Mean annual precipitation: 40 to 50 inches
- Mean annual air temperature: 52 to 57 degrees F
- Frost-free period: 180 to 210 days

**Map Unit Composition**
- Donalton and similar soils: 60 percent
- Minor components: 40 percent
CMREC/LESREC Forage Trial 2012-2014
J. Renshaw & R.D. Myers

Pennington Seed Entries:
- OOG - Olympia Orchardgrass
- JTF - Jessup (542 Max Q) Tall Fescue
- BLT - Barliza Timothy
- DWC - Durana White Clover
- PWC - Patriot White Clover

Kings Agri-Seed Entries:
- POG - Persist Orchardgrass
- EOG - Endurance Orchardgrass
- BTF - BarOptima Plus E34 Tall Fescue
- MPB - Matua Prairie Bromegrass
- BKB - Balin Kentucky Bluegrass
- FRC - Freedom Red Clover

Treatments: Forage Seed Mixtures | Setting
--- | ---
A - OOG 45% + JTF 45% + DWC 10% | 5
B - OOG 45% + BTF 45% + PWC 10% | 5
C - POG 45% + JTF 45% + DWC 10% | 5
D - POG 45% + BTF 45% + PWC 10% | 5
E - EOG 45% + JTF 45% + DWC 10% | 5
F - EOG 45% + BTF 45% + PWC 10% | 5
G - BKB 20% + BTF 70% + DWC 10% | 4
H - BKB 20% + JTF 70% + PWC 10% | 4
I - BLT 25% + POG 60% + FRC 15% | 5
J - BLT 25% + MPB 60% + FRC 15% | 5
K - EOG 45% + MPB 40% + FRC 15% | 5
L - OOG 60% + BLT 10% + BKB 20% + FRC 10% | 5
Pasture Herbicides
Pre-Emergence & Post-Directed

- **Aromatic Amino-Acid 5 Enolpyruvyl-Shikimate-3-Phosphate Synthase (EPSP) Inhibitors**

  **Glycines WSSA G9**

  Glyphosate: Roundup Weather Max® 7+

  *Roundup formulations* or Touchdown ® or Credit® or Rattler®

  ✓ Post-emergence with no soil activity or uptake.
  ✓ Non-selective.
  ✓ Contact systemic herbicide: foliar absorption with excellent translocation.
  ✓ Consult label for surfactant use.
Pasture Herbicides
Pre-Emergence & Post-Directed

- Cell Membrane Disrupters
  - Bipyridiliums WSSA D22
  - Paraquat: Gramoxone Inteon®

Post-emergence with no soil activity or uptake.

- Non-selective.
- Contact herbicide: rapid foliar absorption with some leaf translocation.
- Use with a non-ionic surfactant (NIS).
Herbicide Mode of Action & Classification

- Glutamine Synthetase Inhibitor
  Phosphinic Acids WSSA H10
  Glufosinate: Ignite® or Rely®

  ✓ Non-selective Post-emergence with no soil activity or uptake
  ✓ Contact systemic herbicide: foliar absorption with moderate plant translocation
  ✓ Do not use with a surfactant – Use AMS – 4 Hour Rainfast
  ✓ Rotational Crop Restrictions:
    Corn & Soybeans – 0 days
    Small Grains & Vegetables – 70 days
    Hay Crops – 180 days

Chemical Disk!
June 27, 2012
Green Engineered Area
Annual Cover Crops

Sacrifice Lot Management - Myers 2005.doc
German Foxtail Millet

5 Days AP
German Foxtail Millet
35 Days AP
German Foxtail Millet
65 Days AP
Creative Pest Control?
Off Label - Ignite It! + Lorsban!

September 4, 2012
October 24, 2012
J - BLT 25% + MPB 60% + FRC 15%
October 24, 2012
F - EOG 45% + BTF 45% + PWC 10%
October 24, 2012
E - EOG 45% + JTF 45% + DWC 10%
Dave's Yard: Bluegrass, Tall Fescue & Ladino Clover
Orchardgrass Strategy:

✓ Watch the root development of the newly seeded orchardgrass stand, not just the top growth.

✓ Allow the roots to establish deep into the plow layer before heavy cutting or grazing pressure is applied.
1st Cutting May 15, 2013
1st Cutting May 15, 2013
Orchardgrass Notes:

✓ Winter dormancy: December 1st to March 15th.
✓ Summer dormancy: July 1st to August 1st (30-day rest period).
✓ 18% Crude Protein (12% Digestible Protein) for regrowth cutting interval of 42 to 56 days when orchardgrass is actively growing.
1st Cutting May 15, 2014
1st Cutting Tons/A  5/15/2014
CMREC, Upper Marlboro

Treatments: Forage Seed Mixtures

A – OOG 45% + JTF 45% + DWC 10%
B – OOG 45% + BTF 45% + PWC 10%
C – POG 45% + JTF 45% + DWC 10%
D – POG 45% + BTF 45% + PWC 10%
E – EOG 45% + JTF 45% + DWC 10%
F – EOG 45% + BTF 45% + PWC 10%
G – BKB 20% + BTF 70% + DWC 10%
H – BKB 20% + JTF 70% + PWC 10%
I – BLT 25% + POG 60% + FRC 15%
J – BLT 25% + MPB 60% + FRC 15%
K – EOG 45% + MPB 40% + FRC 15%
L – OOG 60% + BLT 10% + BKB 20% + FRC 10%
1st Cutting Quality Assessment 5/15/2014
CMREC, Upper Marlboro

10-Excellent 1-Poor

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Treatments: Forage Seed Mixtures

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1st Cutting May 15, 2014
1st Cutting May 15, 2014
A - OOG 45% + JTF 45% + DWC 10%

Yield - 1.70
Quality - 8.50
1st Cutting May 15, 2014
B - OOG 45% + BTF 45% + PWC 10%

Yield - 1.78
Quality - 8.50
1st Cutting May 15, 2014
C - POG 45% + JTF 45% + DWC 10%

Yield - 1.65
Quality - 8.00
1st Cutting May 15, 2014
D - POG 45% + BTF 45% + PWC 10%

Yield - 1.75
Quality - 7.75
1st Cutting May 15, 2014
E - EOG 45% + JTF 45% + DWC 10%

Yield - 1.43
Quality - 7.50
1st Cutting May 15, 2014
F - EOG 45% + BTF 45% + PWC 10%

Yield – 1.43
Quality – 7.50
1st Cutting May 15, 2014
G - BKB 20% + BTF 70% + DWC 10%

Yield – 1.25
Quality – 8.50
1st Cutting May 15, 2014
H - BKB 20% + JTF 70% + PWC 10%
Yield – 1.25
Quality – 9.00
1st Cutting May 15, 2014
I - BLT 25% + POG 60% + FRC 15%

Yield – 2.03
Quality – 9.50
1st Cutting May 15, 2014
J - BLT 25% + MPB 60% + FRC 15%

Yield - 0.80
Quality - 5.50
1st Cutting May 15, 2014
K - EOG 45% + MPB 40% + FRC 15%

Yield - 1.68
Quality - 8.00
1st Cutting May 15, 2014

L - OOG 60% + BLT 10% + BKB 20% + FRC 10%

Yield - 1.90
Quality - 9.25
Crop Rotation

High residue crops

Cover crops

Forages
Alfalfa Overseeded with Orchard Grass
Did You Get Agronomy News!
Thank You!
Any Questions?