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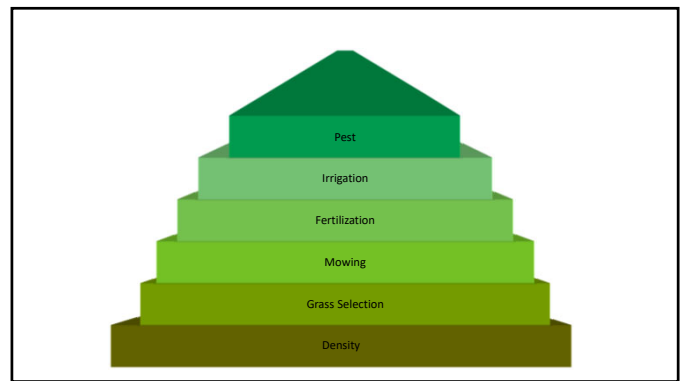
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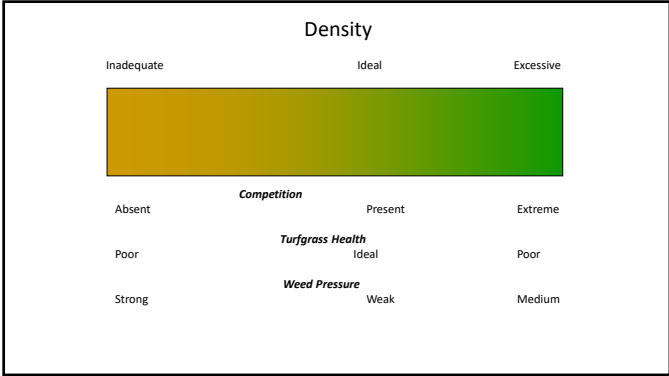
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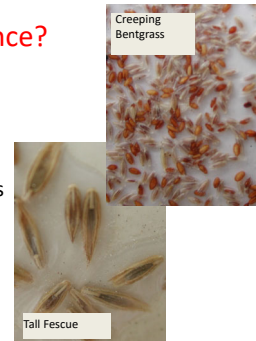
Cool Season Turfgrasses

Turfgrass	Seeding Rate (pounds (lbs.)/1000 sq.ft)	Approximate number of seeds/pound	Days to germination
Colonial bentgrass	1 to 2	7,000,000	6 to 12
Creeping bentgrass	0.5 to 1	6,000,000	4 to 12
Fine fescue	4 to 5	350,000	10 to 20
Kentucky bluegrass	2 to 3	2,250,000	6 to 30
Perennial ryegrass	6 to 10	250,000	3 to 7
Tall fescue	5 to 8	250,000	6 to 12

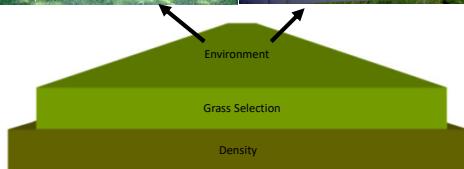
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Why the Difference?

- Different species have different size seeds
- Goal is to establish 1000 to 2000 seedlings ft²



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Cool Season Turfgrass Shade Tolerance

Shade Ranking	Species
Excellent	Hard fescue Red fescue Chewing fescue Rough bluegrass Annual bluegrass
Good	Kentucky bluegrass Tall fescue Creeping bentgrass
Moderate	Perennial ryegrass

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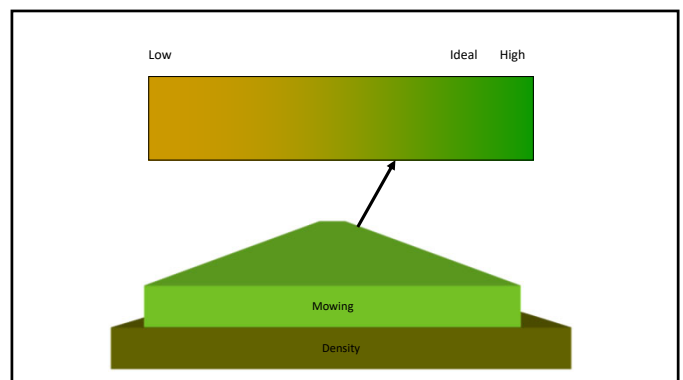


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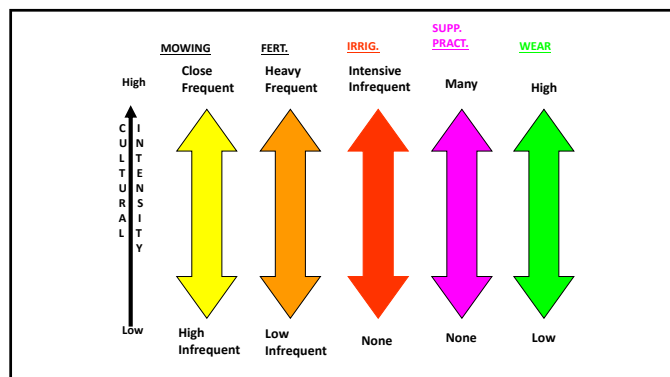
Powdery Mildew

- Pathogen: *Erysiphe graminis*
- Symptoms:
 - Whitish to gray dust or powder-like mycelium
- Occurrence
 - spring & autumn during cool, humid, cloudy periods
- Primary host
 - Kentucky bluegrass (primarily), fescua spp.
- Control
 - Resistant cultivars, avoid drought

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Mowing Heights

Turfgrass Species	Spring and Fall	Summer Stress Periods
Kentucky bluegrass	2.0 – 2.5 inches	2.5 – 3.0 inches
Perennial ryegrass	2.0 – 2.5 inches	2.5 – 3.0 inches
Fine fescues	2.0 – 2.5 inches	2.5 – 3.0 inches
Tall fescue	2.5 – 3.0 inches	2.5 – 3.0 inches

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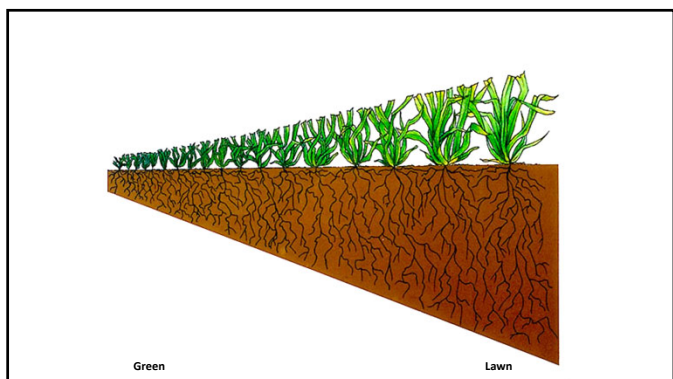
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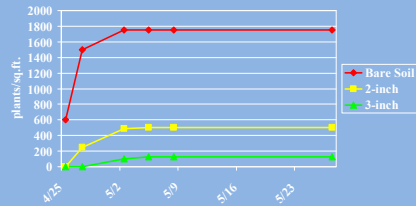


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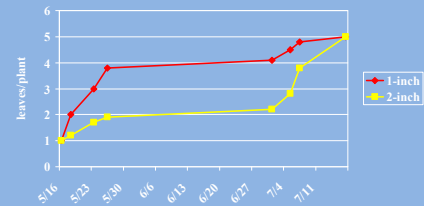
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Crabgrass Population Influenced By Mowing Height



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Mowing Height Influence on Crabgrass Development



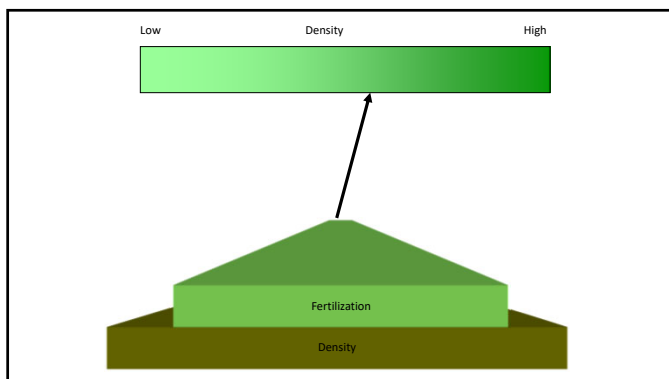
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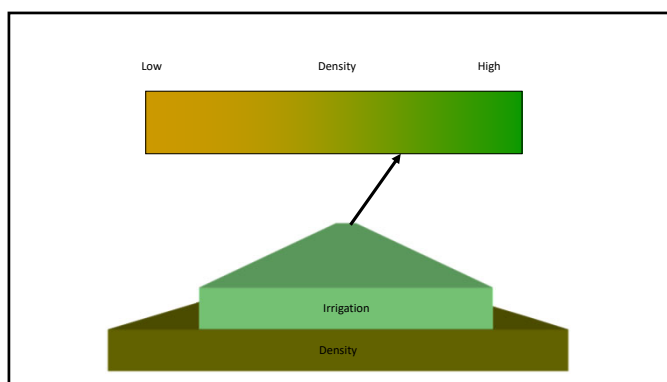
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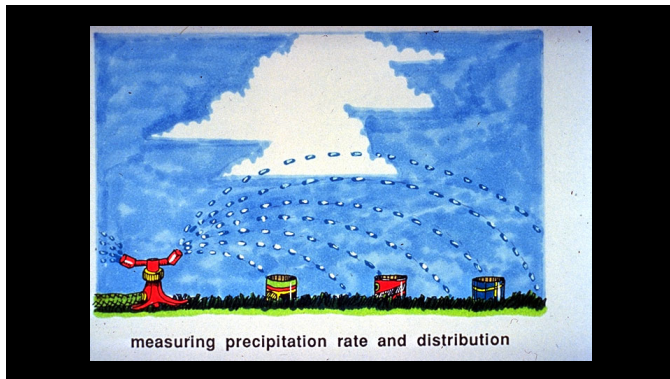
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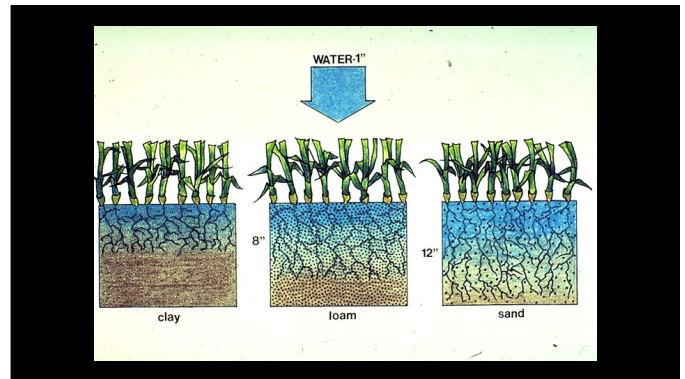
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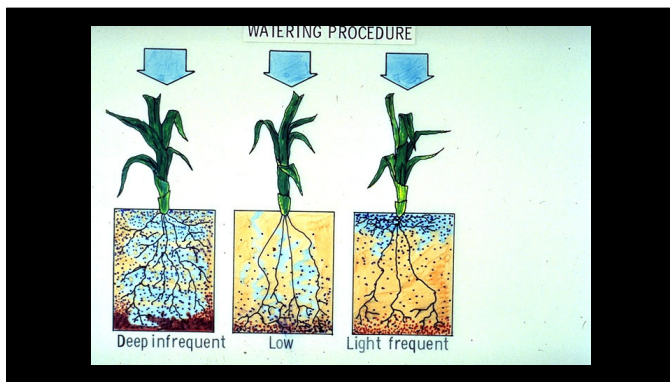
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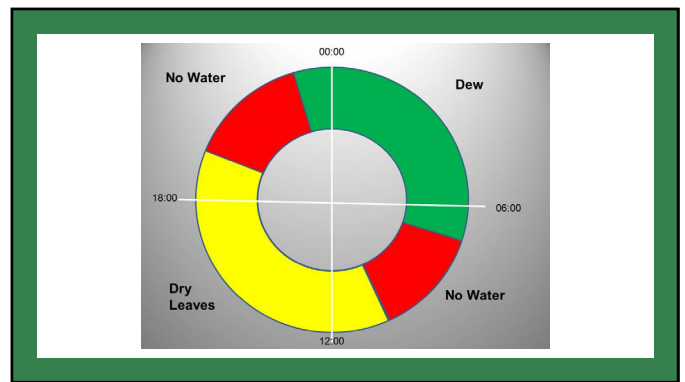
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