

Weed Management During Alfalfa Stand Establishment

2021 Annual Alfalfa and Forage
Field Day

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Today's Talk

- 1) Why worry about weeds during stand development?
- 2) Planning your seedling alfalfa weed management program
- 3) Key points to maximize Postemergence herbicides efficacy
- 4) Seedling Alfalfa Weed Survey

1) Why worry about weeds during stand development?

- ❖ It is ***the most*** important period for weed control
- ❖ It affects stand productivity and longevity
- ❖ Weeds grow faster than alfalfa
- ❖ Effective weed control is crucial for production of high quality marketable hay
- ❖ Poisonous weeds may turn hay unmarketable



2) Planning your seedling alfalfa weed management

... is a marathon, not a sprint

(Dr. Earl Creech, Utah State University)

- Get off to a good start
- Maintain a good pace
- Finish strong



VS



2) Planning your seedling alfalfa weed management

... is a marathon, not a sprint

(Dr. Earl Creech, Utah State University)

... is a relay race marathon!



Integrated
Weed
Management

Cultural
Mechanical
Chemical



2) Planning your seedling alfalfa weed management

A. Start clean !

- Site selection
- Herbicide carryover
- Seedbed prep
- Variety selection / seed quality
- ***Planting date***
- Seeding rate
- Seeding method/equipment
- Seeding depth
- Pre irrigate and control weeds
- Control perennial weeds before planting



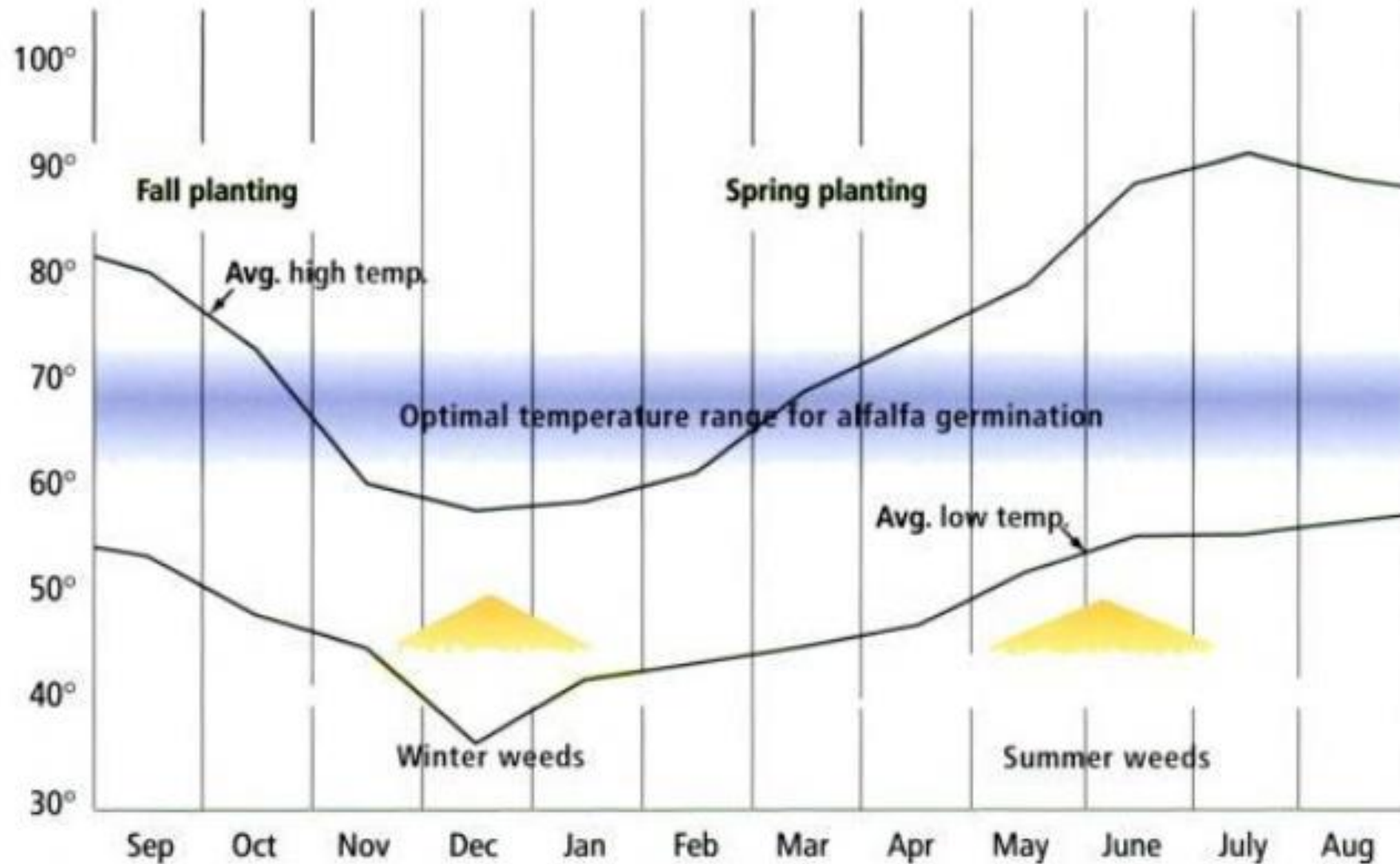
2) Planning your seedling alfalfa weed management

❖ The importance of planting dates

- **Fall Establishment**
- Planting in warmer soils (69 to 76 F)
 - Faster germination and growth
 - More competitive crop
- Cold temperatures may result in variable germination
- May also favor winter weeds, especially mustards, shepherd's purse, chickweed and winter grasses
- September to mid-October (SJV)



2) Planning your seedling alfalfa weed management



2) Planning your seedling alfalfa weed management

❖ The importance of planting dates

- **Spring Establishment**
- Early seeding is also important to avoid summer weeds such as nutsedges, pigweed, and barnyardgrass
- Alfalfa planted in February to March (SJV) germinates before the peak germination of summer weeds
- Get a head start! Prepare seedbeds and borders in the previous Fall



2) Planning your seedling alfalfa weed management

B. Chemical weed control

- Herbicides are a crucial component of an effective integrated weed management program
- There are 14 different herbicide active ingredients available for weed control in seedling alfalfa in CA
- Nine different sites of action (SOA)
- Contact vs Systemic
- Soil (preemergent) vs Foliar (postemergent) activity



3) Key points to maximize Postemergence herbicides efficacy

A. Weed ID



Lynn Sosnoskie. Weed ID:
Traditional Tools to Smartphone
Apps



3) Key points to maximize Postemergence herbicides efficacy

A. Weed ID

B. Weed Size (small weeds herbicides)

- Smaller weeds are controlled easier
- Competition from small weeds is minimal and does not normally impact yields



3) Key points to maximize Postemergence herbicides efficacy

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C. Application technology

D. Herbicide Resistance Management

- Italian ryegrass, horseweed, hairy fleabane, palmer amaranth



5) Conclusion

- ❖ Weeds are a continuous battle from planting throughout the final year of the stand
- ❖ Weed control effectiveness will depend on many factors
 - Weed type and population
 - Soil type
 - Remaining life of the stand
 - Strength of the hay market
- ❖ A combination of good cultural practices and timely weed management decisions will provide a long lasting and productive hay field



4) Seedling Alfalfa Weed Management Programs Survey!



Please, open the camera of your smartphone and point to the QR code to get access to the survey.
Thanks!

