

New Alfalfa Herbicide Registrations

2016 Alfalfa and Forage Field Day

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University of California

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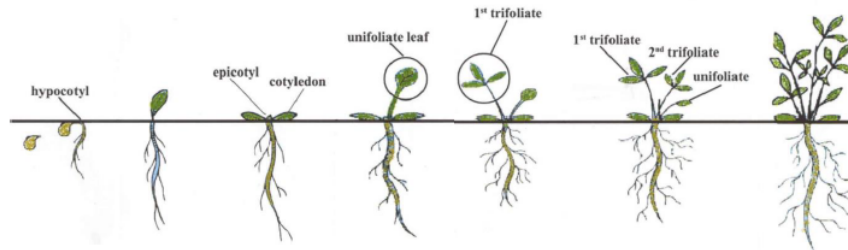
Herbicide Timing for Alfalfa in California

Herbicide brand names	Before planting	Preplant incorporate	1 st Trifoliate	2 nd Trifoliate	3 rd Trifoliate	4 th Trifoliate	1 st Cutting	4 th Cutting	Dormant	Between cuttings
Roundup Ready										
Gramoxone Inteon										
Balan										
Eptam										
Select Max										
Poast										
Kerb										
Buctril										
Butyrac 200										
Buctril + Butyrac 200										
Raptor										
Pursuit										
Raptor + Pursuit										
Raptor + Buctril or Butyrac 200										
Pursuit + Buctril or Butyrac 200										
Prowl H ₂ O										
Sandea										
Chateau										
Treflan TR-10										
Solicam										
Karmex or Durex										
Treflan										
Velpar										
Shark										
Sharpen										
Treatment timing based on alfalfa growth stage	Before planting	Preplant incorporate	1 st Trifoliate	2 nd Trifoliate	3 rd Trifoliate	4 th Trifoliate	1 st Cutting	4 th Cutting	Dormant	Between cuttings

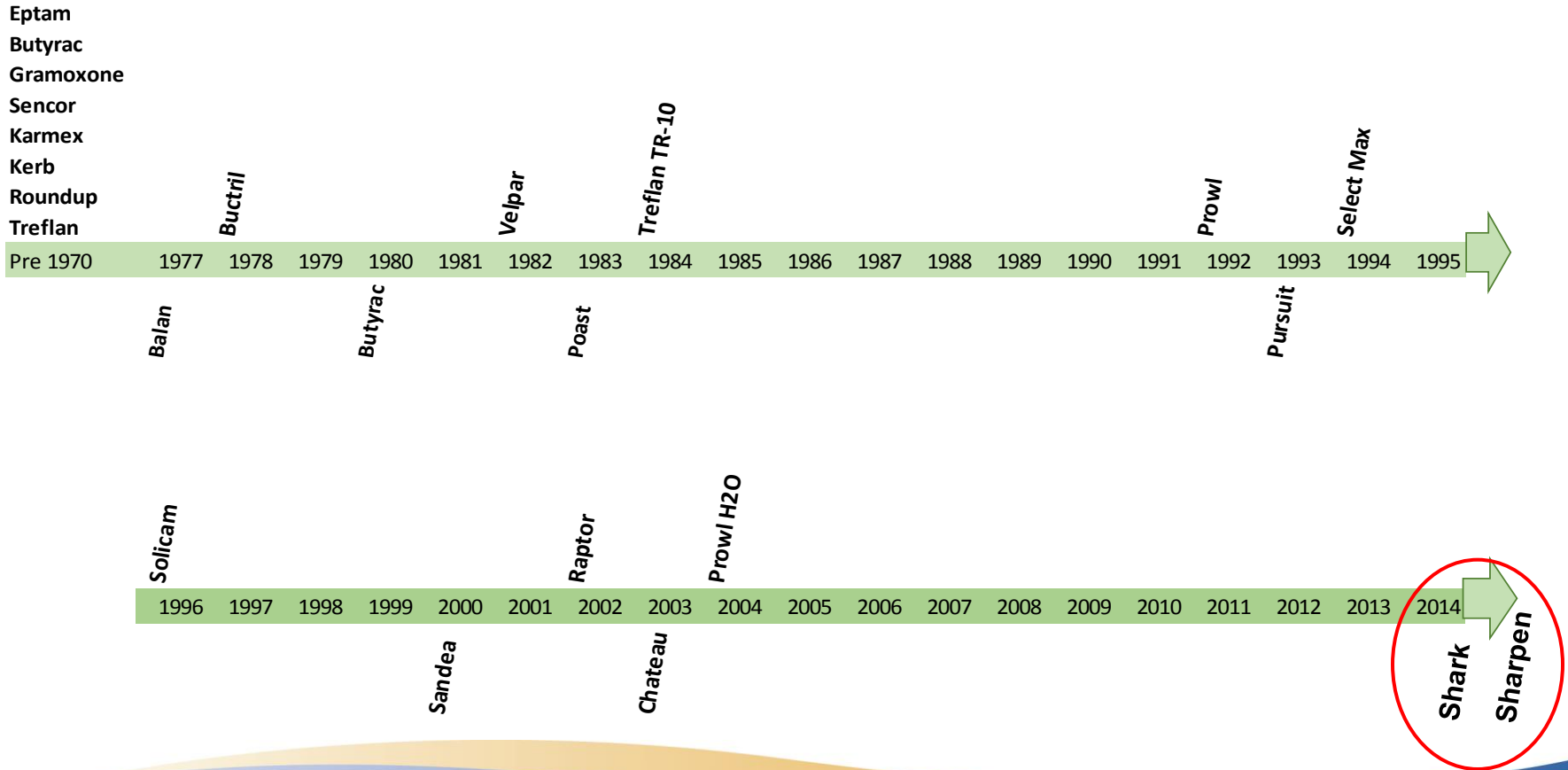
= registered treatment timing
 = may delay harvest and/or reduce yield

This is not an endorsement for any of the trade names listed, nor does the omission of specific trade names reflect the view of the author. Refer to your local chemical dealer or manufacturer for specific herbicide products available. Numerous factors influence the performance of herbicides, so consult the manufacturer's labels for specific treatment recommendations.
 Kurt Hembree, UCCE, Fresno County (website at: ce.fresno.ucanr.edu). September 2016.

Alfalfa seedling development stages:



Herbicide registration timeline in alfalfa in California



Intermountain:

FD: 2-5

Cuts: 3-4

Elev.: 2,100-3,950 ft

Alfalfa Production Regions in California



Sacramento Valley:

FD: 4-8

Cuts: 5-7

Elev.: 65 ft

San Joaquin Valley:

FD: 7-9

Cuts: 7-8

Elev.: 330-660 ft

Low Desert:

FD: 9

Cuts: 9-11

Elev.: 0 ft



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Herbicide: Shark EW

Trade name:	Shark EW (by FMC)
Common name:	carfentrazone
WSSA MOA group no:	14
MOA	PPO inhibitor
Application timing:	Preplant Dormant (<6" regrowth) Between cuttings (<6" regrowth)
Equipment:	Ground or air
PHI:	21 days (3 days if seed crop)

Herbicide: Shark EW

Activity:	Postemergence (broadleaves only)
Use rate/acre:	Up to 2.5 fl oz (2.5 fl oz/season)
Adjuvant required:	UAN, or NIS, or COC , or MSO , or OS + MSO
Broadleaf weeds including (<4" tall):	Cheeseweed, filaree, mustards, shepherd's-purse, sowthistle, groundsel, lambsquarters, pigweeds, russian thistle, others
Tank-mix partners include:	Prowl H ₂ O, Velpar, Treflan, Direx, Roundup, others

Herbicide: Shark EW



Shark EW 1 oz + MSO @
2 inches of Regrowth Timing



Velpar 16 oz
2 inches of Regrowth Timing



Shark EW 1 oz + Velpar 16 oz
2 inches of Regrowth Timing

Herbicide: Shark EW



Untreated check



Shark EW 2 oz + MSO @
2 inches of Regrowth Timing

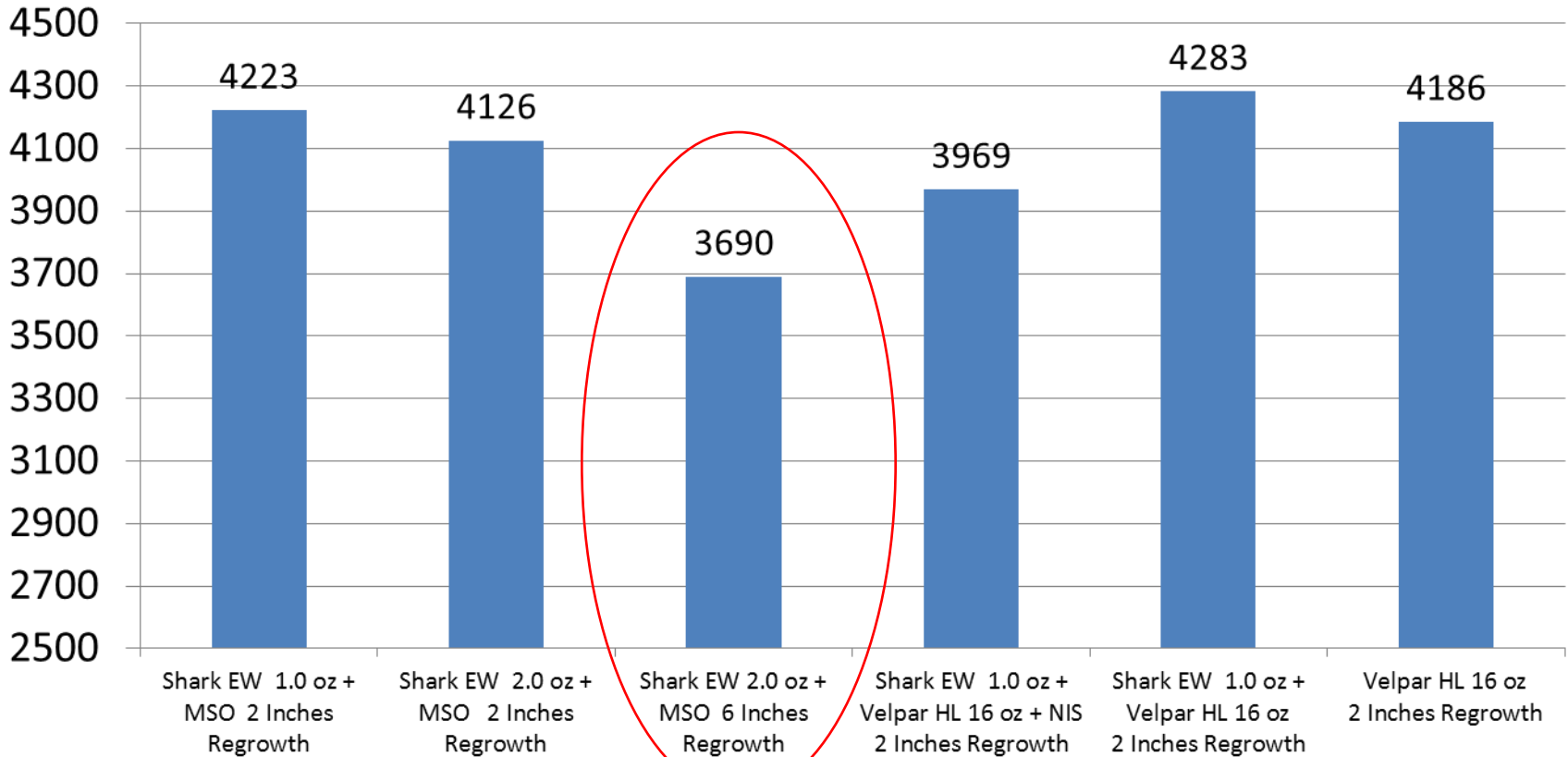


Shark EW 2 oz + MSO @
6 inches of Regrowth Timing

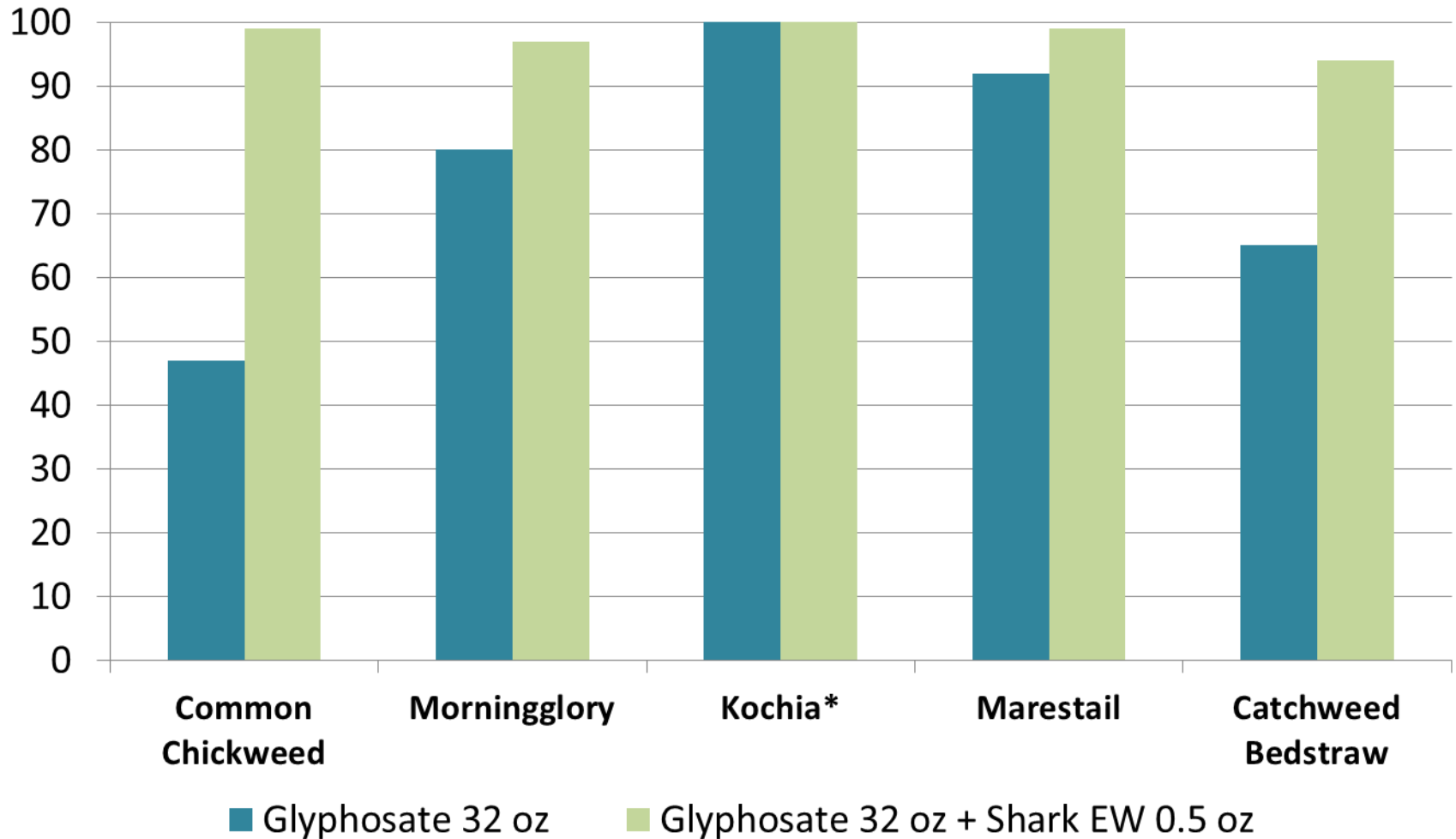
Shark EW Alfalfa – Weed Free Study

Joel Felix – Oregon State University – Ontario, Oregon

Yield Lbs/A



Shark EW – Enhancement of RR



Some benefits of using **Shark EW** in alfalfa:

- Good spectrum of broadleaf weeds controlled
- Quick burndown
- Dormant and after cutting (dodder, pigweed, etc.)
- User safety (CAUTION label)
- Low volatility
- Low, economical use rates
- Resistance management tool

Herbicide: Sharpen

Trade name:	Sharpen (by BASF)
Common name:	saflufenacil
WSSA MOA group no:	14
MOA	PPO inhibitor
Application timing:	Dormant (Nov-Jan; <4" regrowth)
Equipment:	Ground only
PHI:	75 days

Herbicide: Sharpen

Activity:	Postemergence (broadleaves only)
Use rate/acre:	2 fl oz (once/season)
Adjuvant required:	MSO 1% v/v + AMS 1-2% w/v <i>Do not</i> add acidifying agents
Broadleaf weeds including (<4" tall):	Groundsel , fleabane, horseweed fiddleneck, mustards, shepherd's-purse, sowthistle, lambsquarters, pigweeds, others
Tank-mix partners include:	Prowl H ₂ O, Velpar, Treflan, Direx, Roundup, SelectMax, others

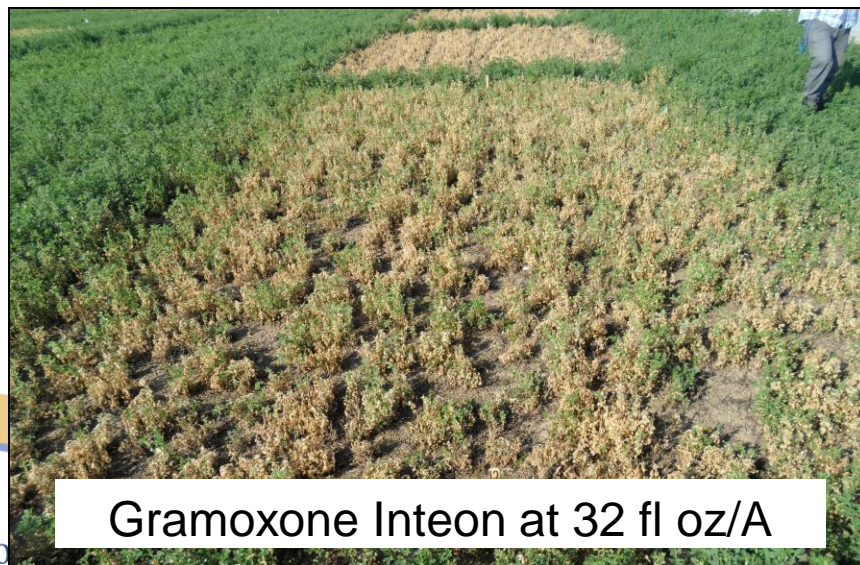
Alfalfa recovery in 2014 (Kearney)

(2 weeks after Feb application of Sharpen):



Alfalfa recovery in 2014 (Kearney)

(2 weeks after early Feb application):



Alfalfa recovery in 2014 (Kearney)

(before 1st cutting):



Treated Dec 2013



Treated Jan 2014



Treated Feb 2014

Alfalfa recovery in 2015

(KAC – 28 Days after Jan treatment):



UNT



Sharpen

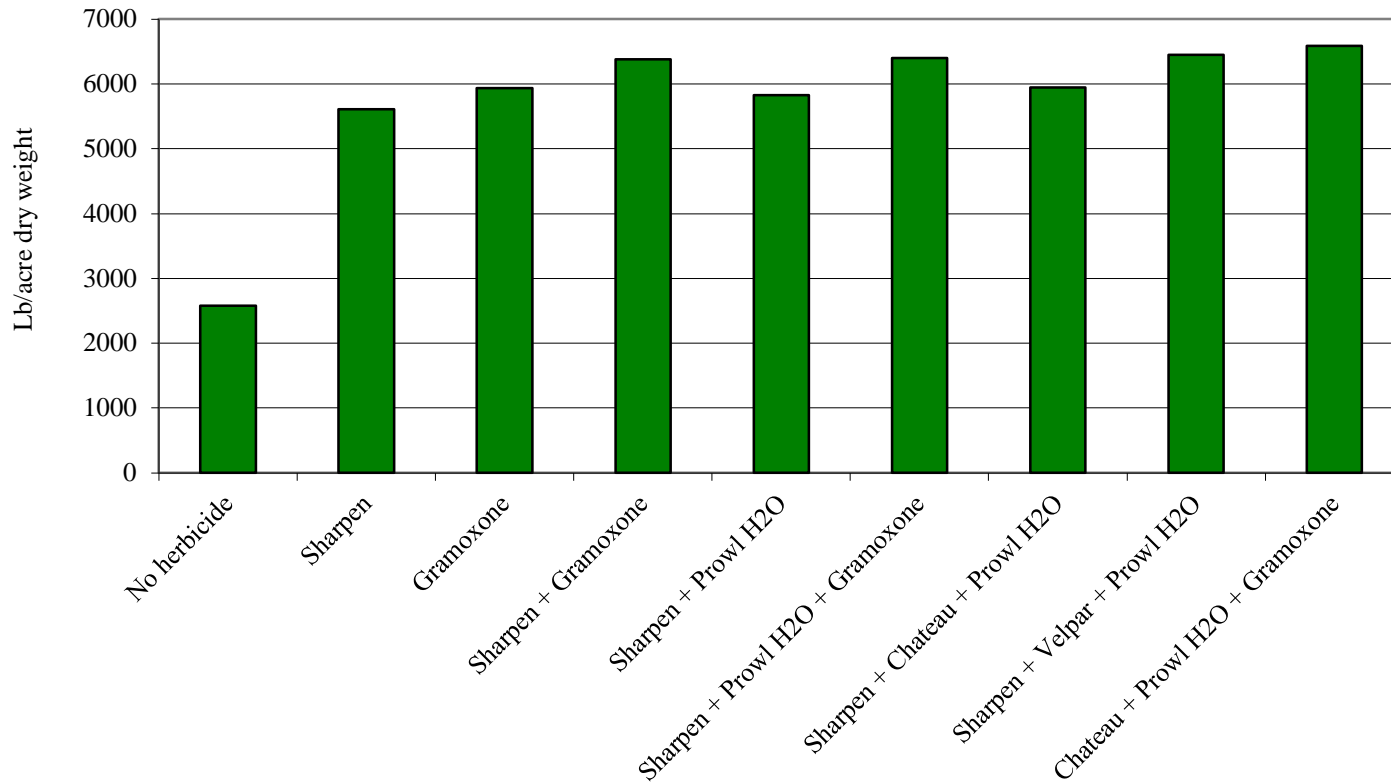


Sharpen + Prowl H2O

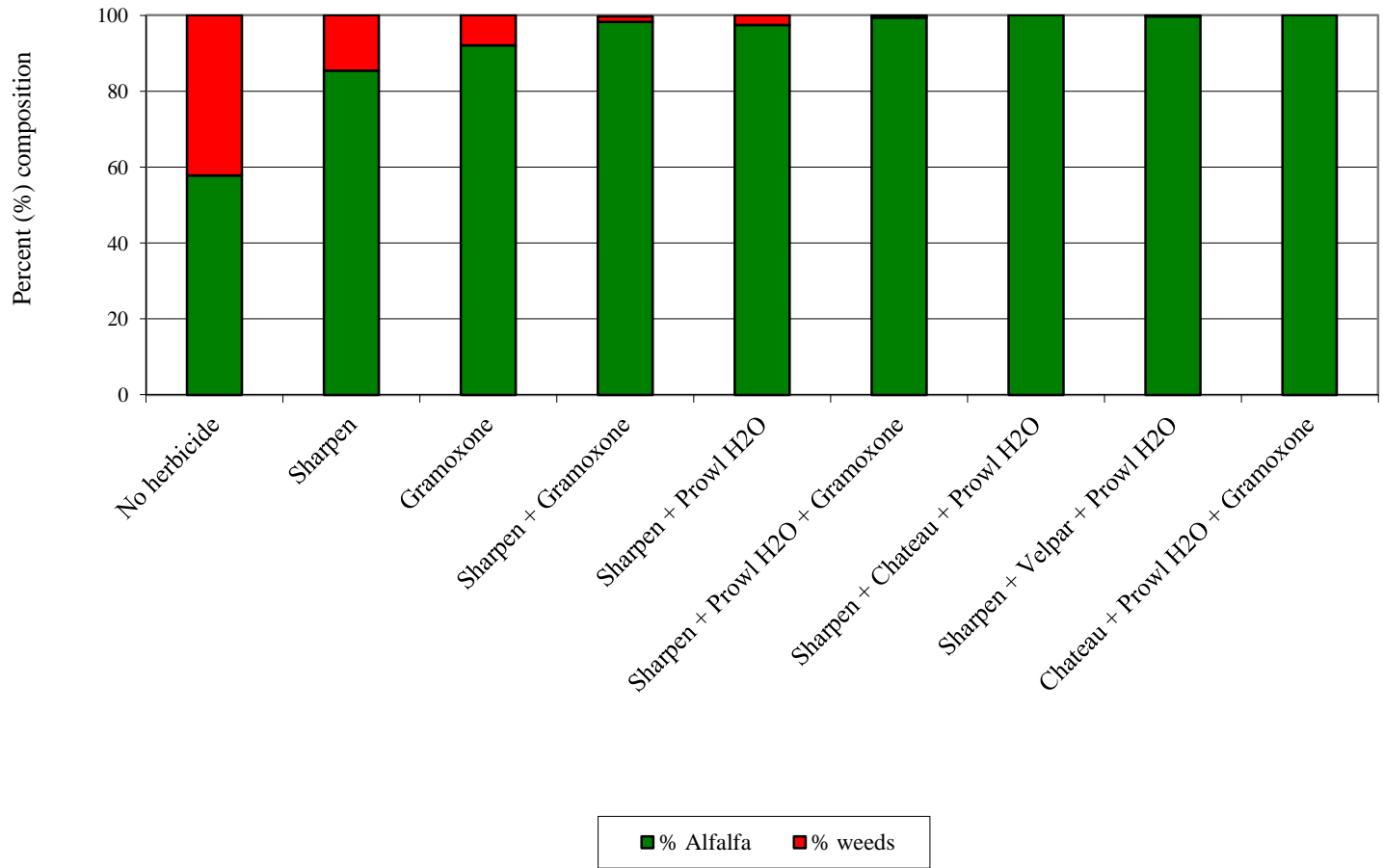


Chateau + Gramoxone

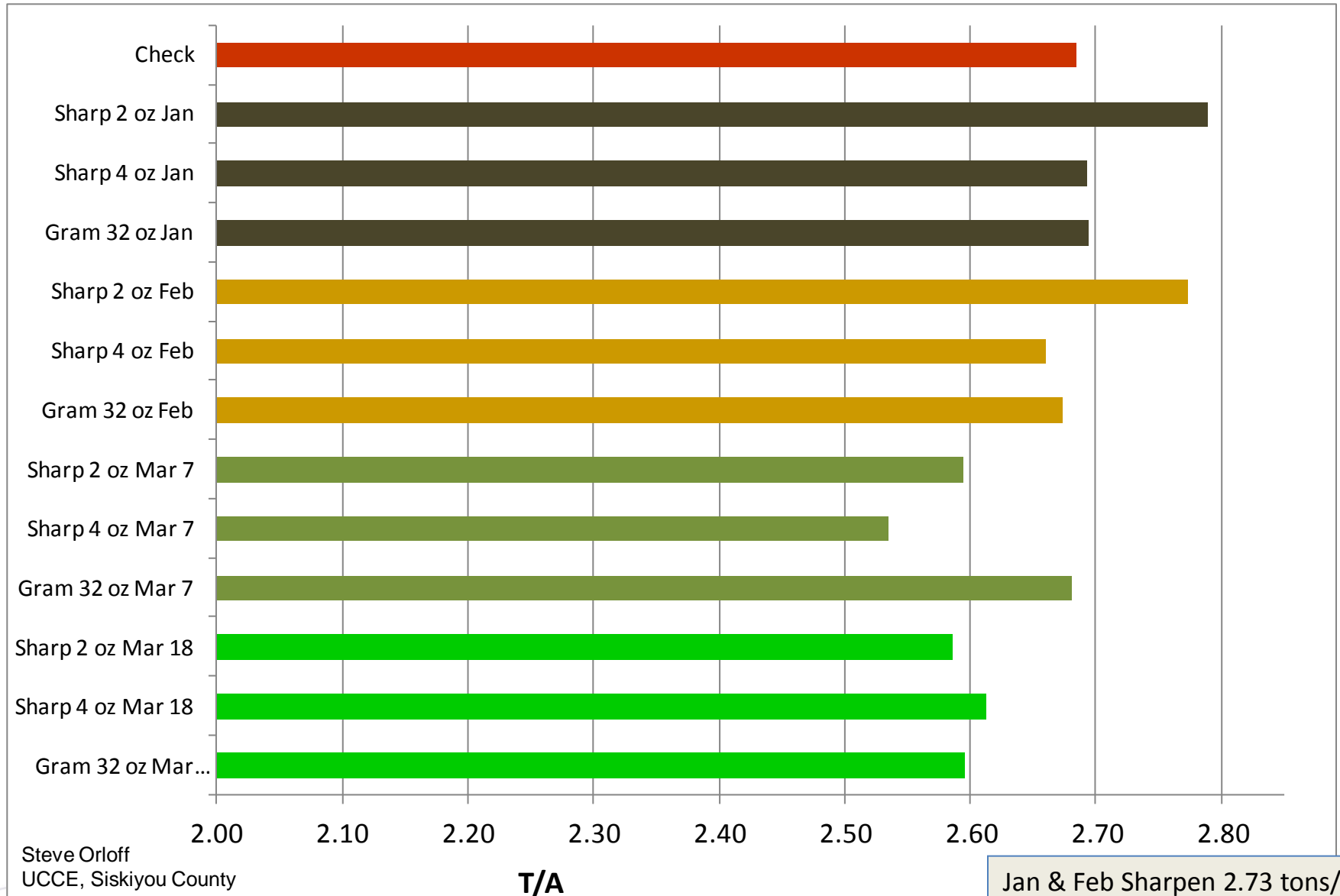
Alfalfa dry weight yield at 1st cutting Parlier, CA - 3/30/16



Alfalfa and weed composition at 1st cutting Parlier, CA - 3/30/16

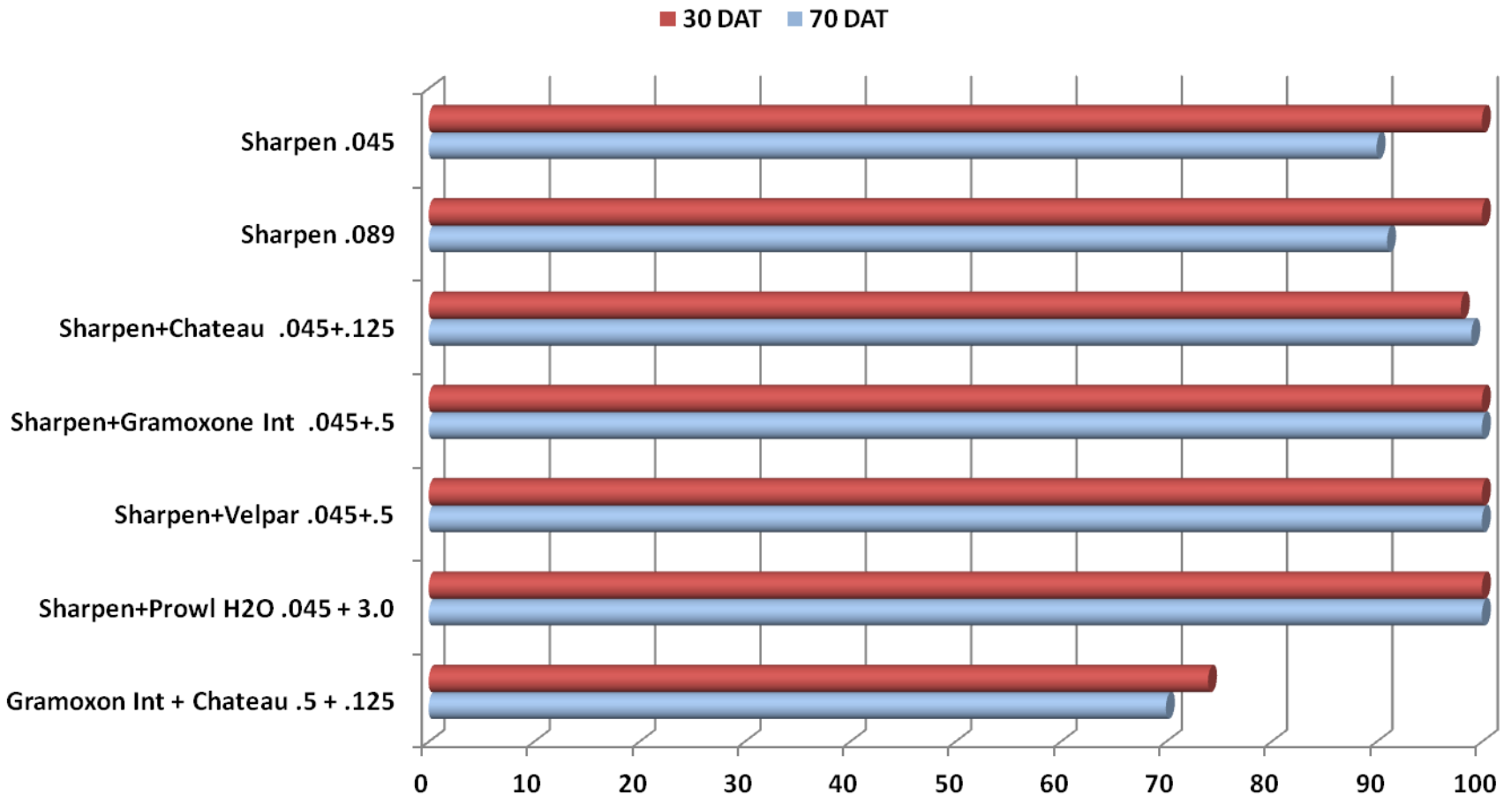


Sharpen Crop Injury Study Yield Data, IREC 2014



Jan & Feb Sharpen 2.73 tons/A
March Sharpen 2.58 tons/A

Common Groundsel Control in 2014



MICK CANEVARI, retired
UCCE, SAN JOAQUIN COUNTY

Sharpen + Pursuit



Metribuzin



Some benefits of using **Sharpen** in alfalfa:

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- Low volatility
- Low, economical use rates
- Resistance management tool



James Schaeffer
SRA, UCCE, Fresno County