

Aerial Nozzle Technologies for Low Volume Application of Fungicide on Corn

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Objective



To evaluate deposition and efficacy of low-volume applications of Headline fungicide on corn using various aerial nozzles and application rates



Headline Fungicide Study on Corn

Thursday – May 22, 2008

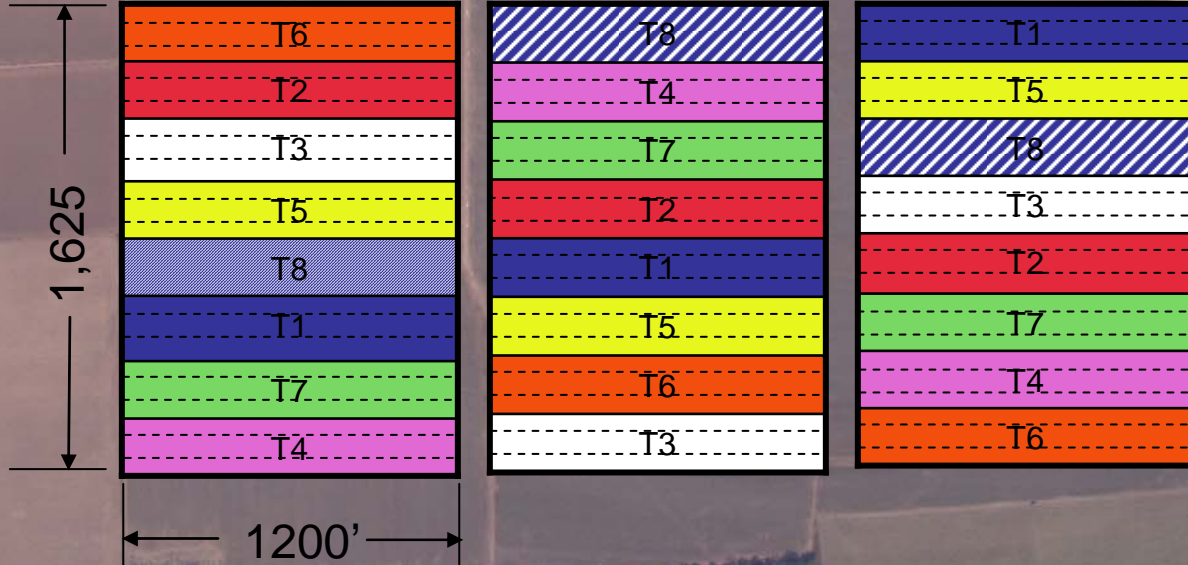
Big Pivot West

N

Rep 1

Rep 2

Rep 3



Headline:
6 oz./acre

Superb HC:
8 oz./100 gal.

Treatment	Nozzle	Rate (GPA)
1	Electrostatic	1
2	CP-11TT	1
3	CP-11TT	2
5	ASC Rotary	2
7	ASC Rotary	1
6	AU-5000	1
4	AU-5000	2
8	Untreated Check	2 (water and COC)



Sampling Locations

Swath 1

Swath 2

Swath 3

x
x
x
x

600'

Equipment Setup

Treatment	Nozzle	# Nozzles	Rate (GPA)	Orifice	Deflection (°)	Pressure (psi)	Airspeed (MPH)
1	Electrostatic	100	1	TXVK-8	0	70	130
2	CP-11TT	21	1	8	90	45	130
3	CP-11TT	39	2	8	90	50	127
5	ASC Rotary	6	2	D12	#4	21	120
7	ASC Rotary	6	1	D8	#4	21	120
6	Micronaire	8	1	VRU=11	60	25	120
4	Micronaire	8	2	VRU=13	60	40	120
8	Check	8	2	VRU=13	60	40	120













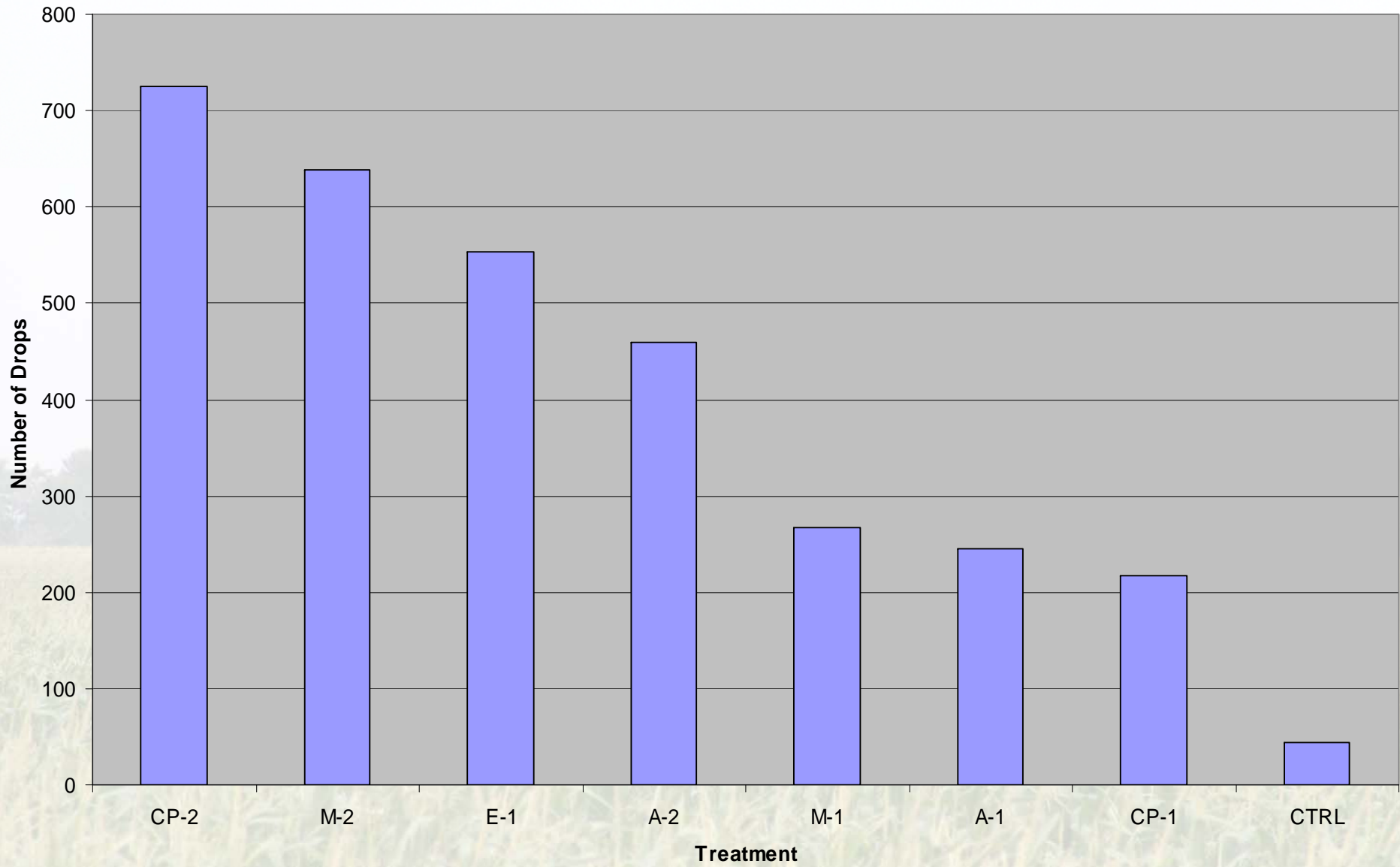




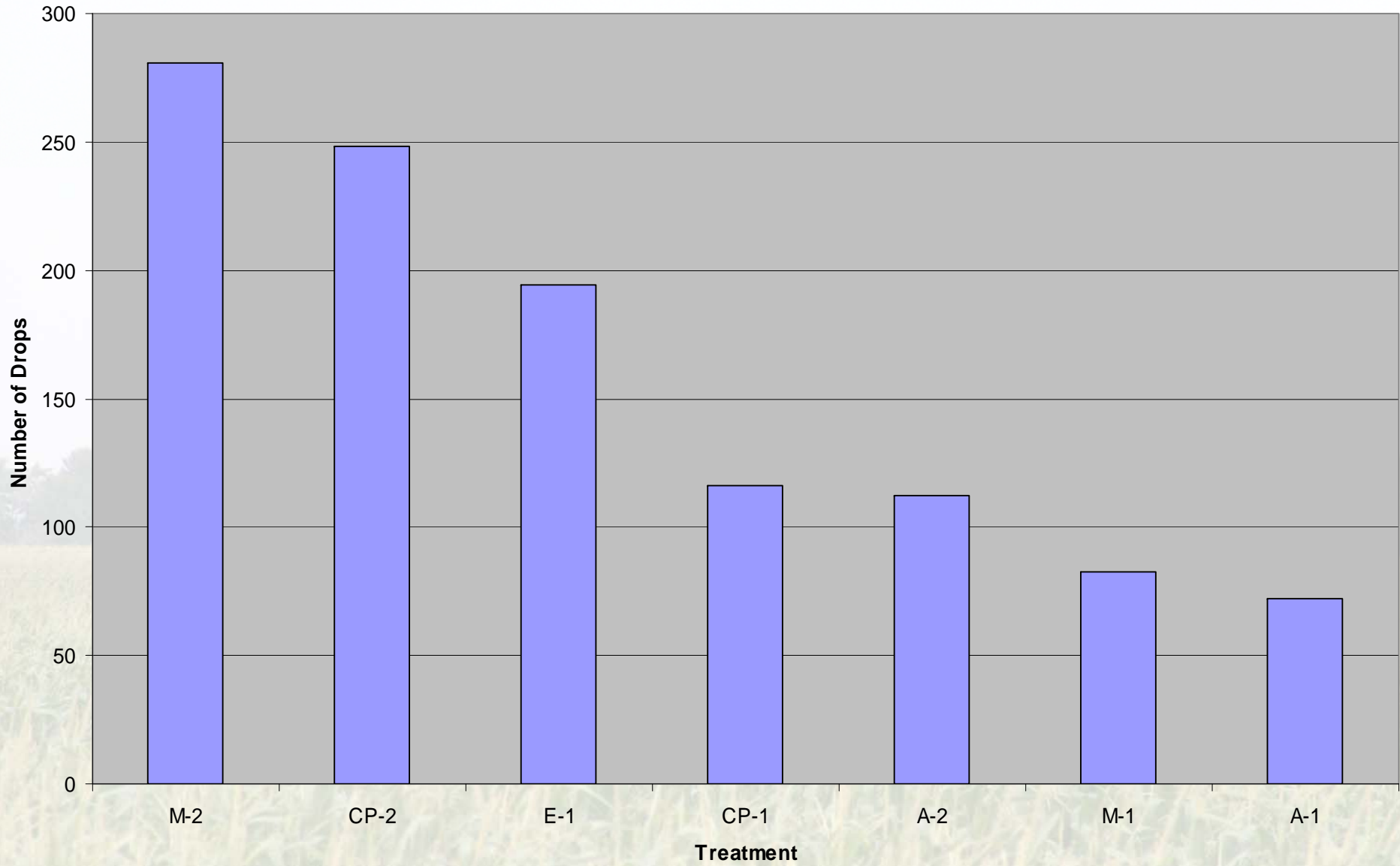
Results



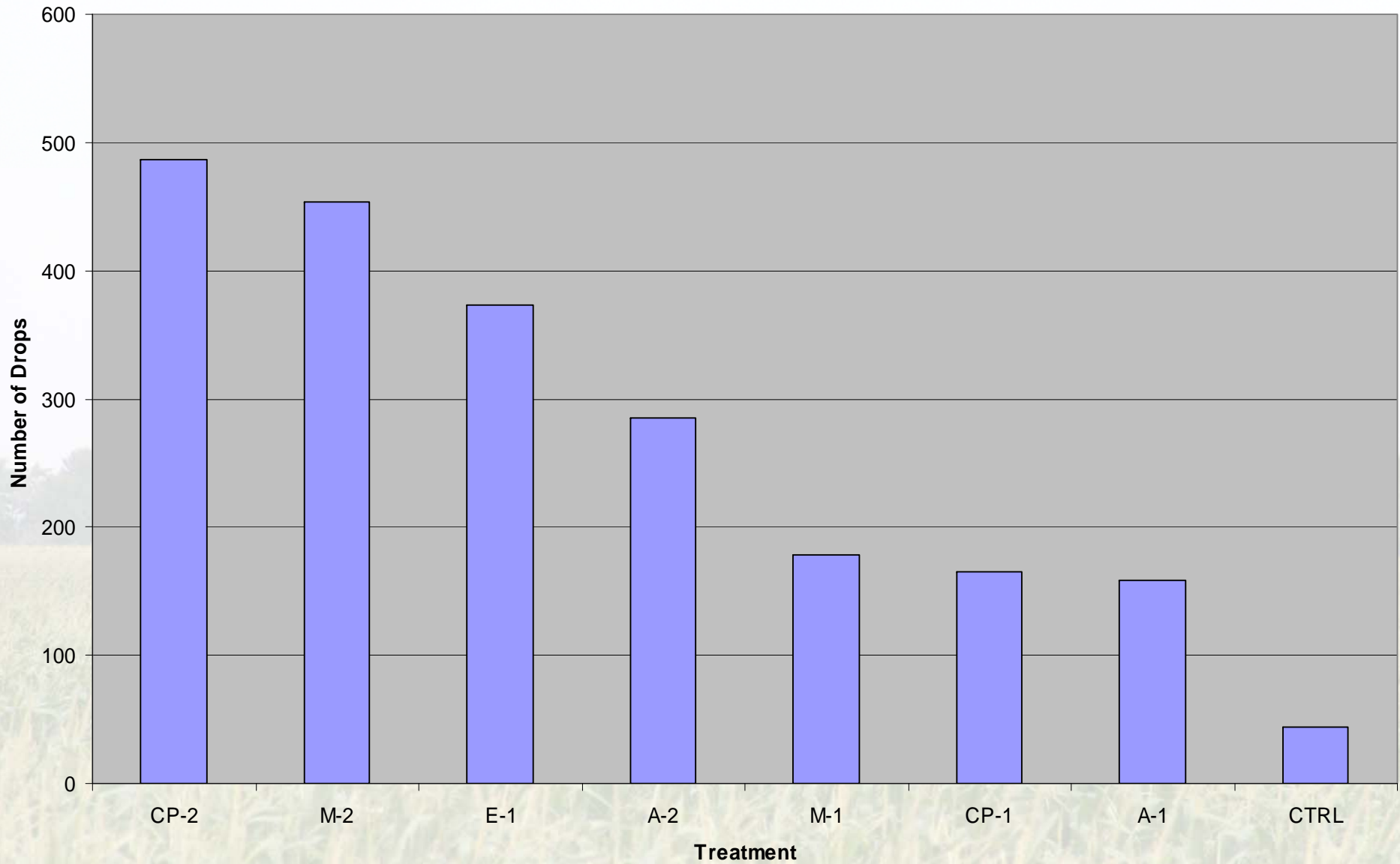
WSP Top Canopy



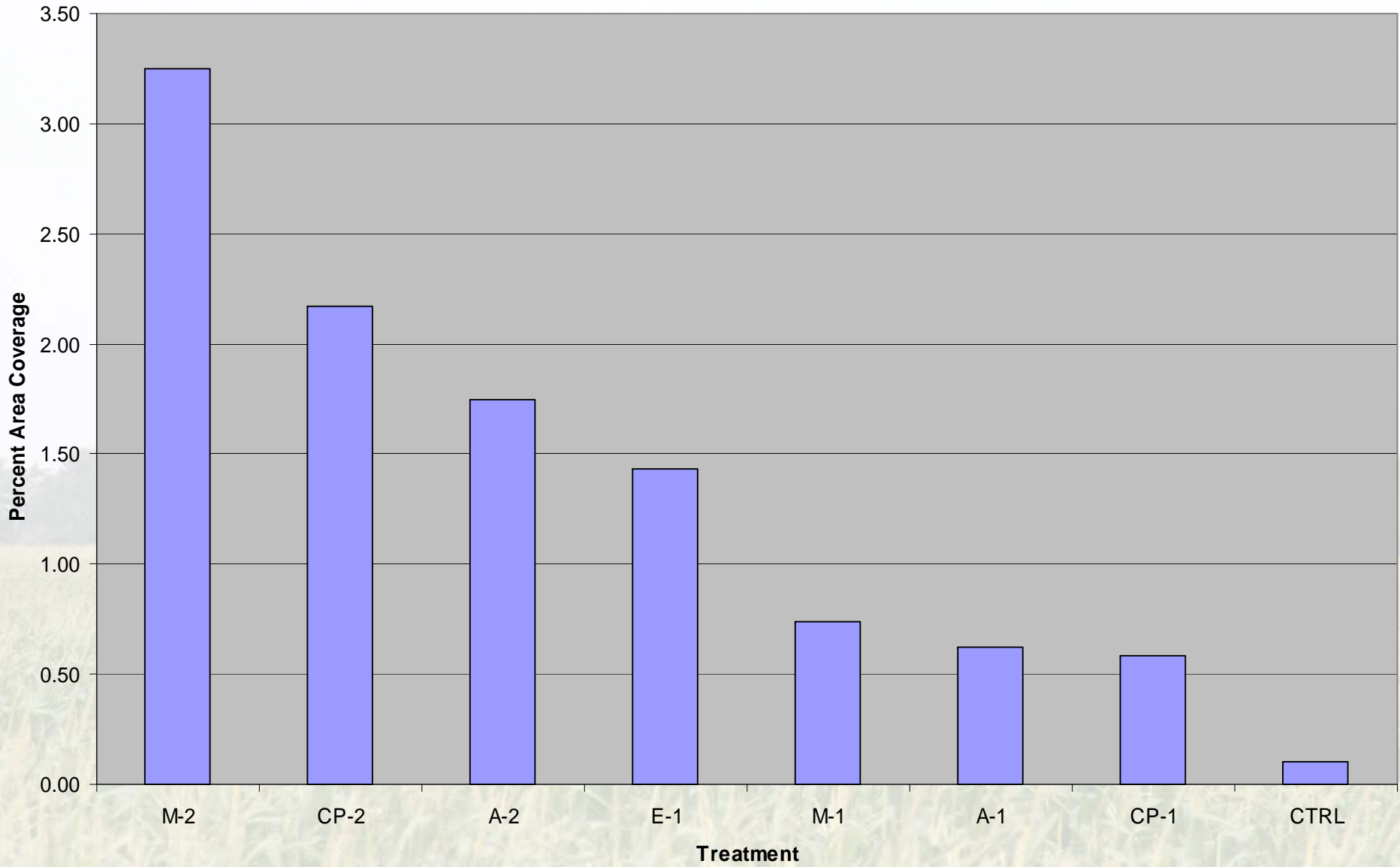
WSP Mid Canopy



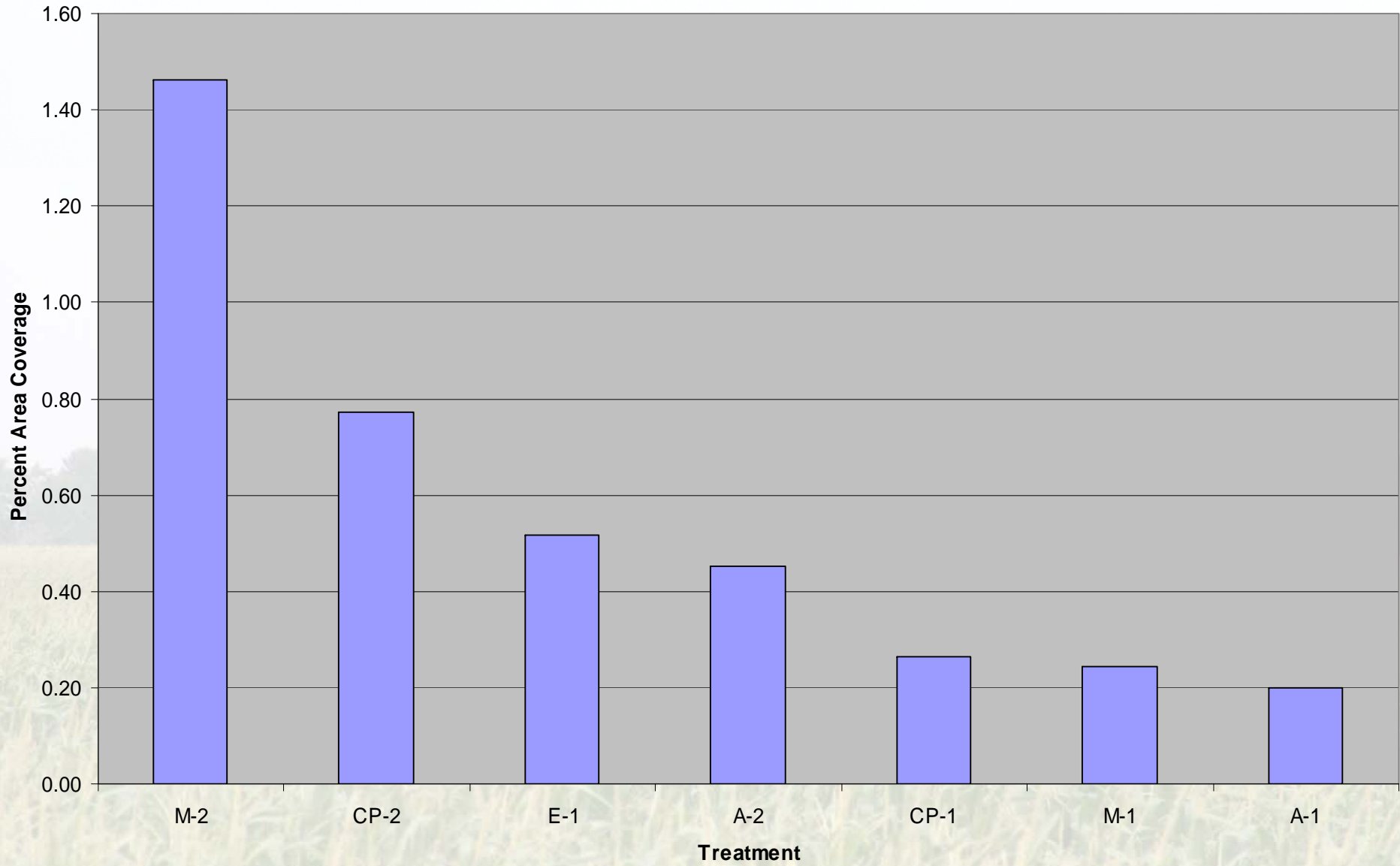
WSP Overall



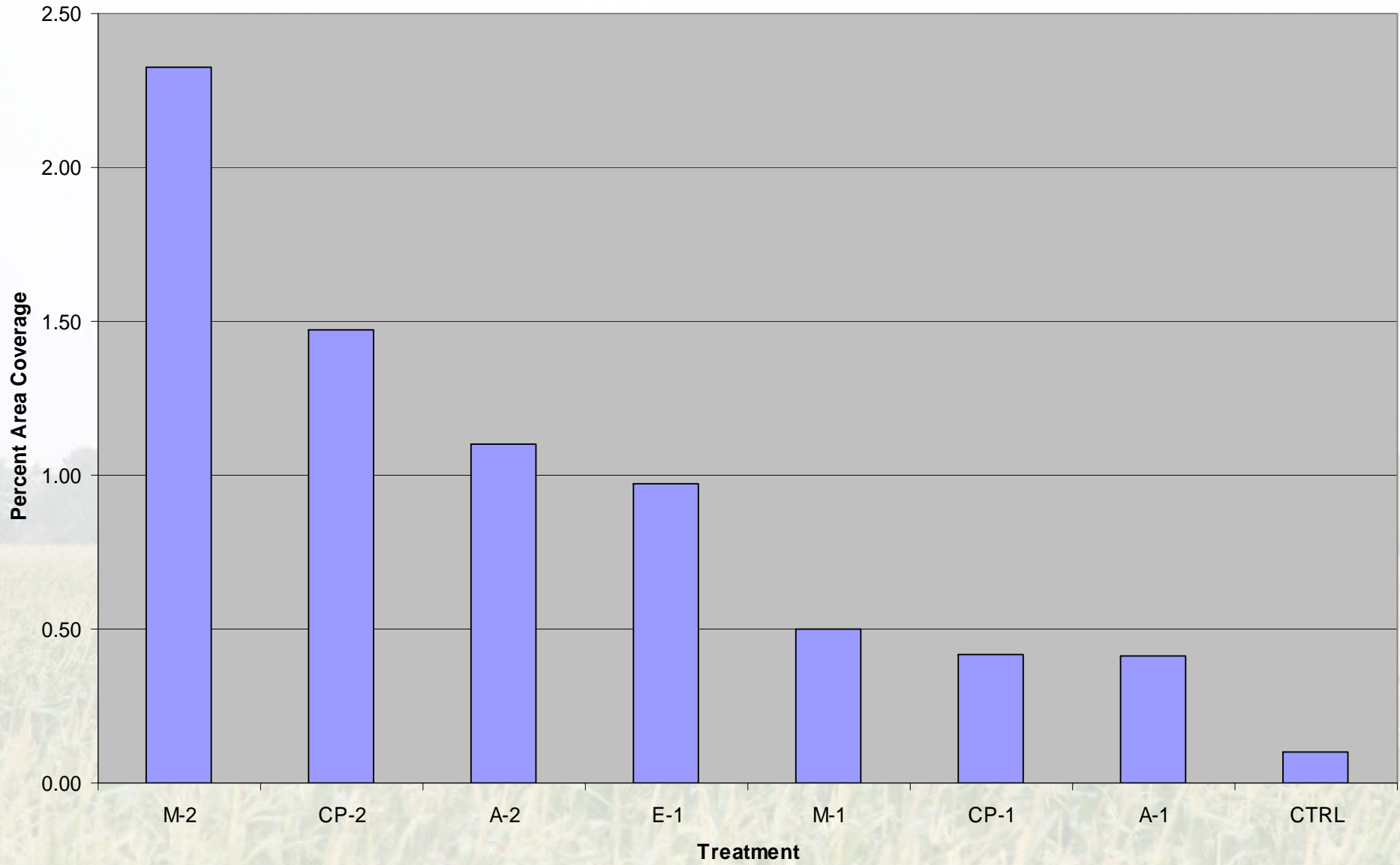
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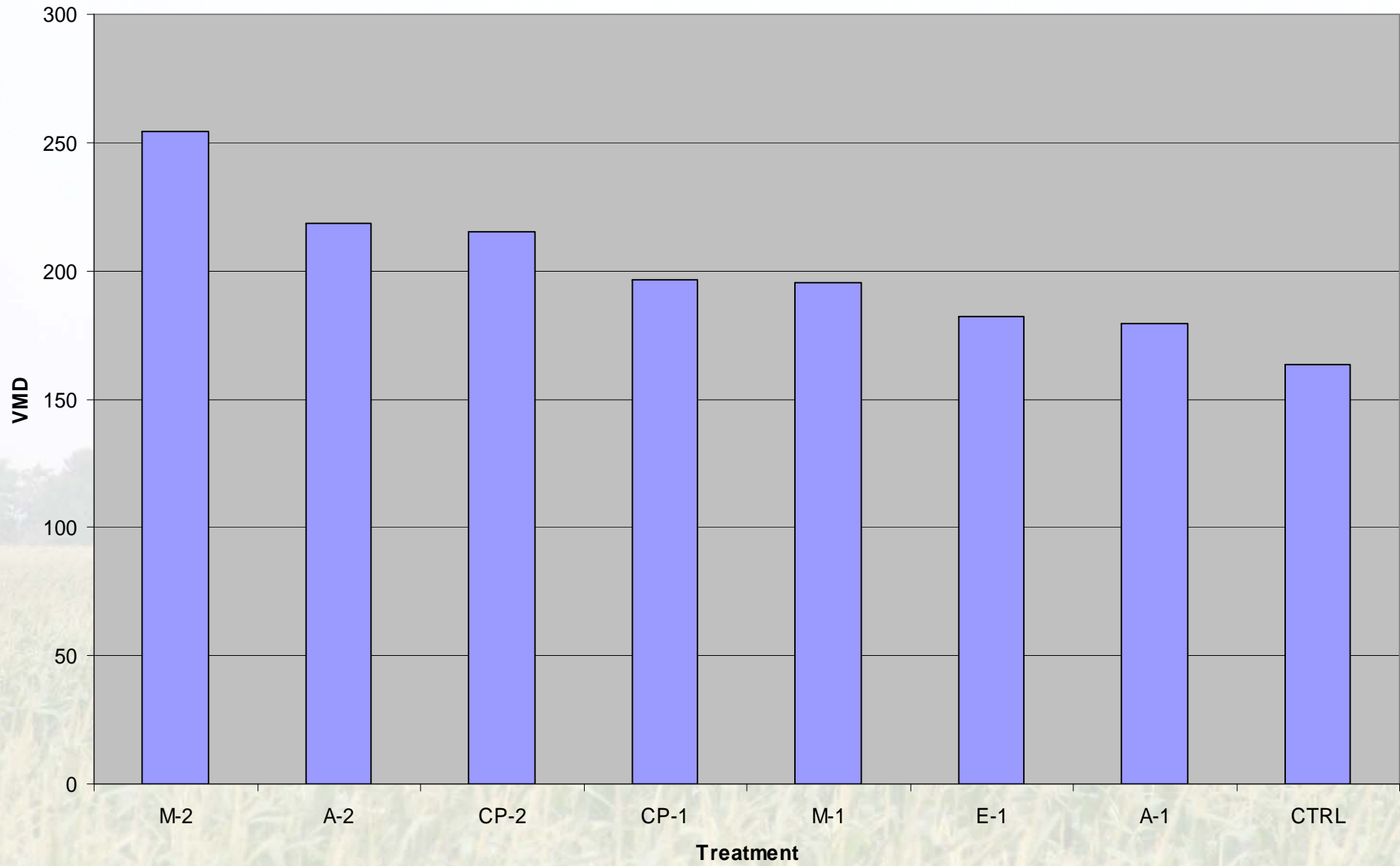
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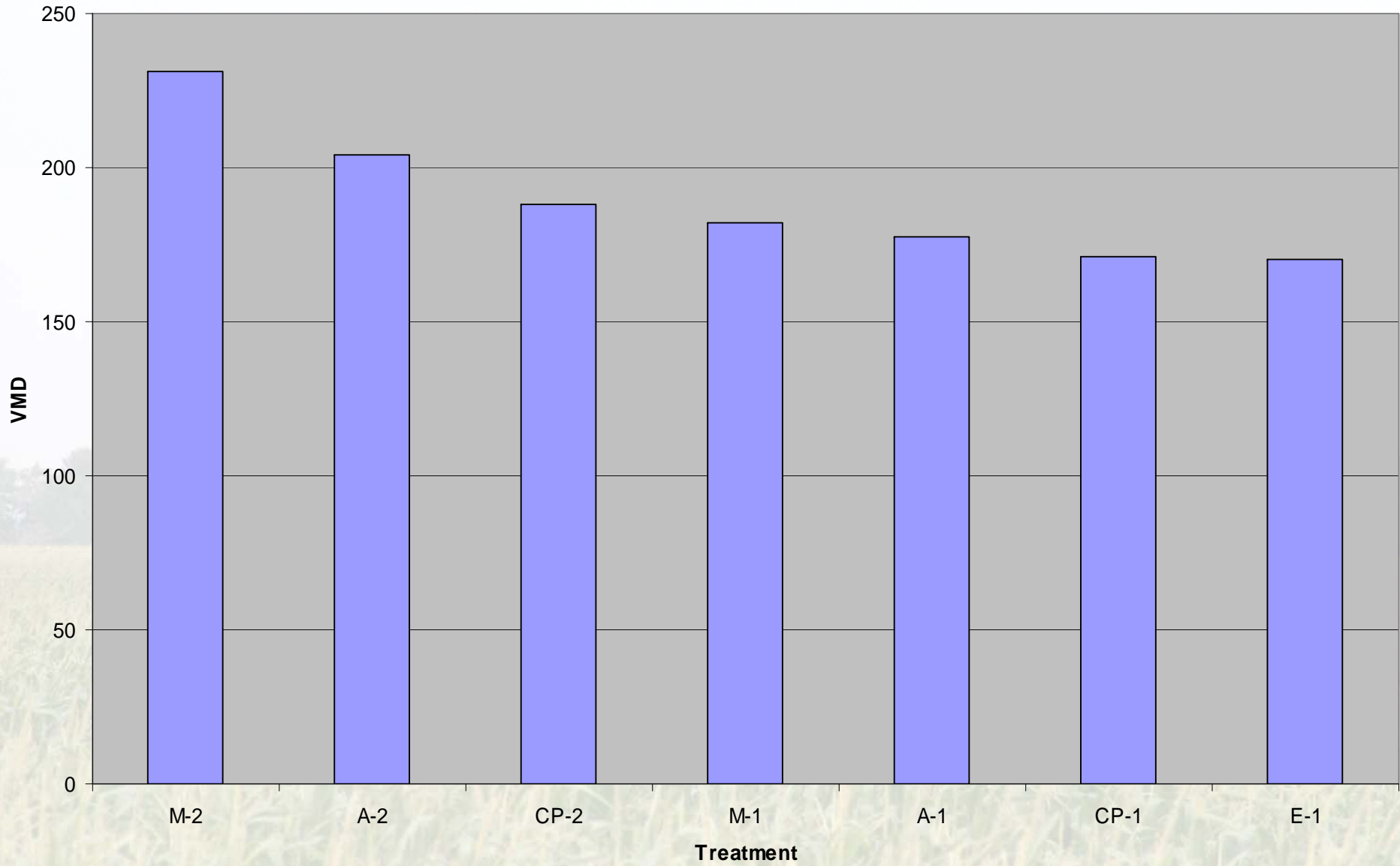
WSP Overall



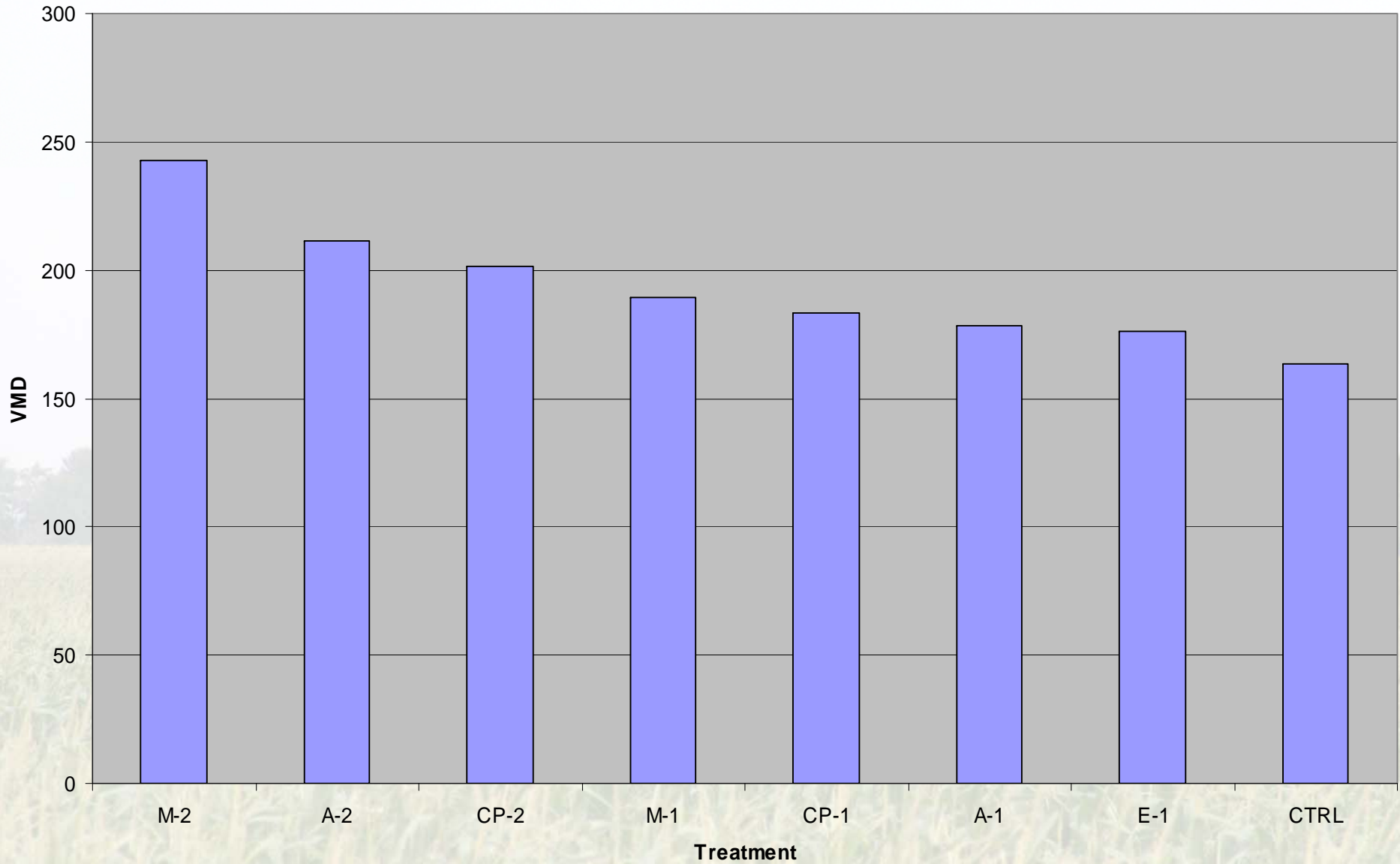
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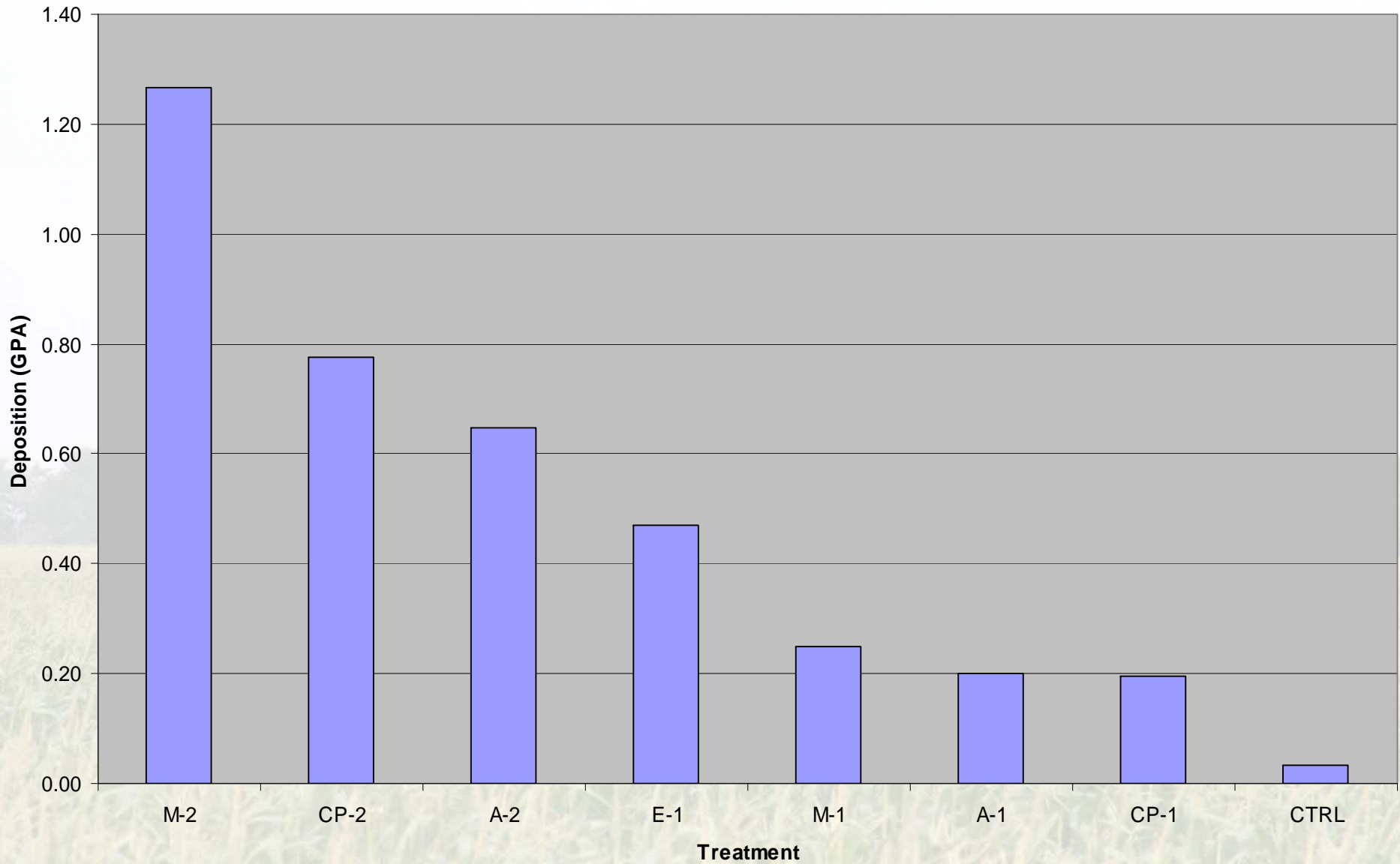
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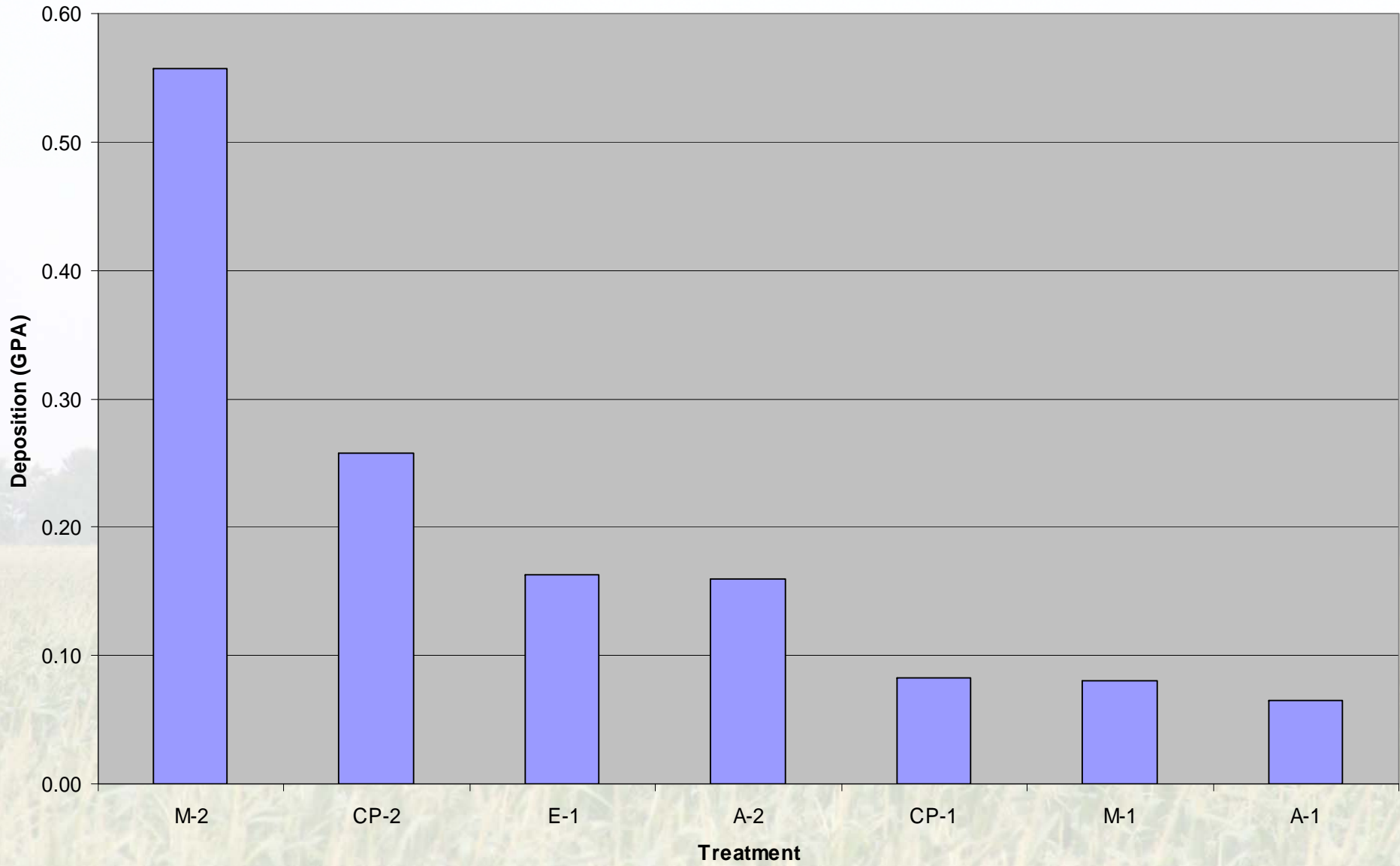
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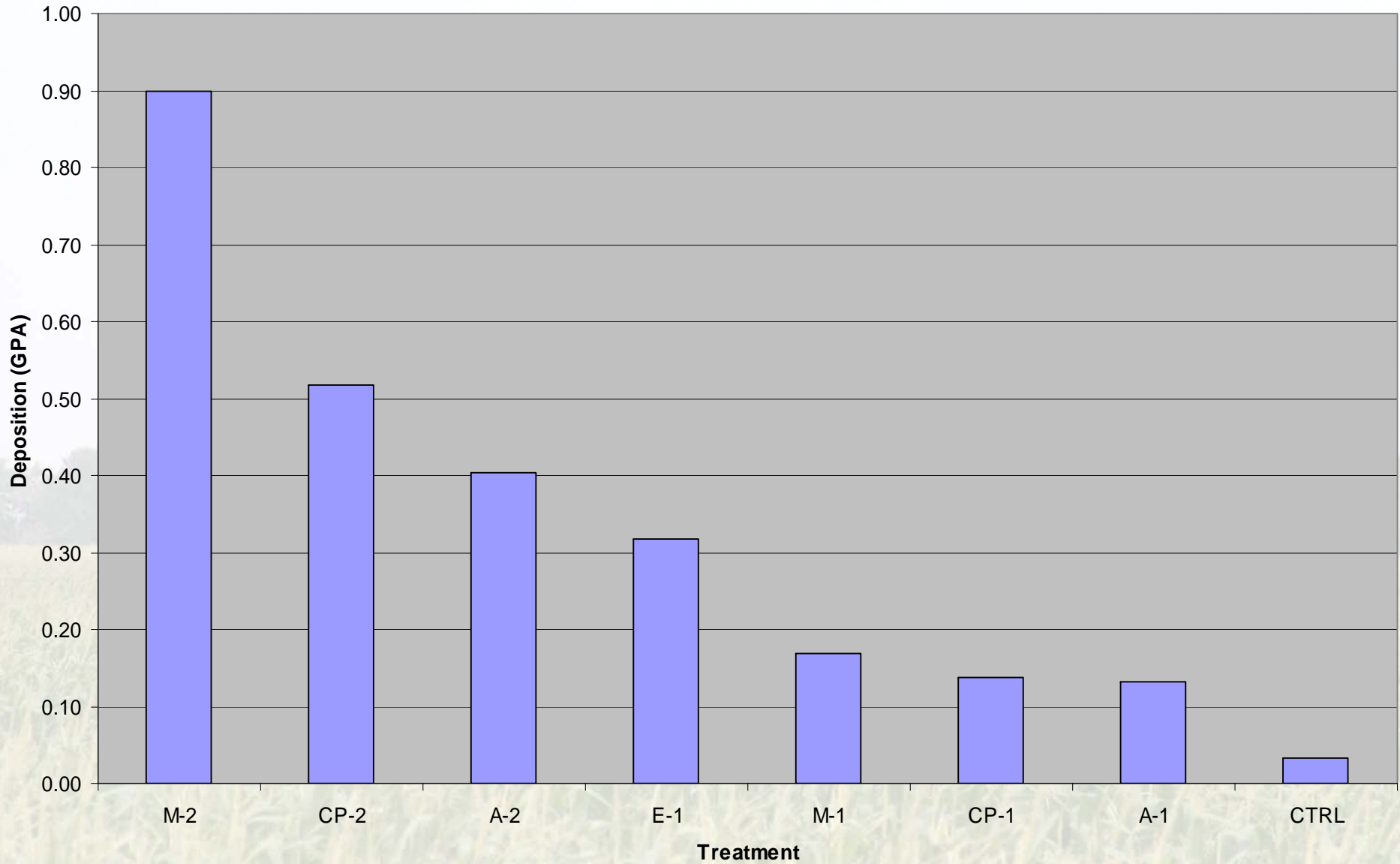
WSP Top Canopy



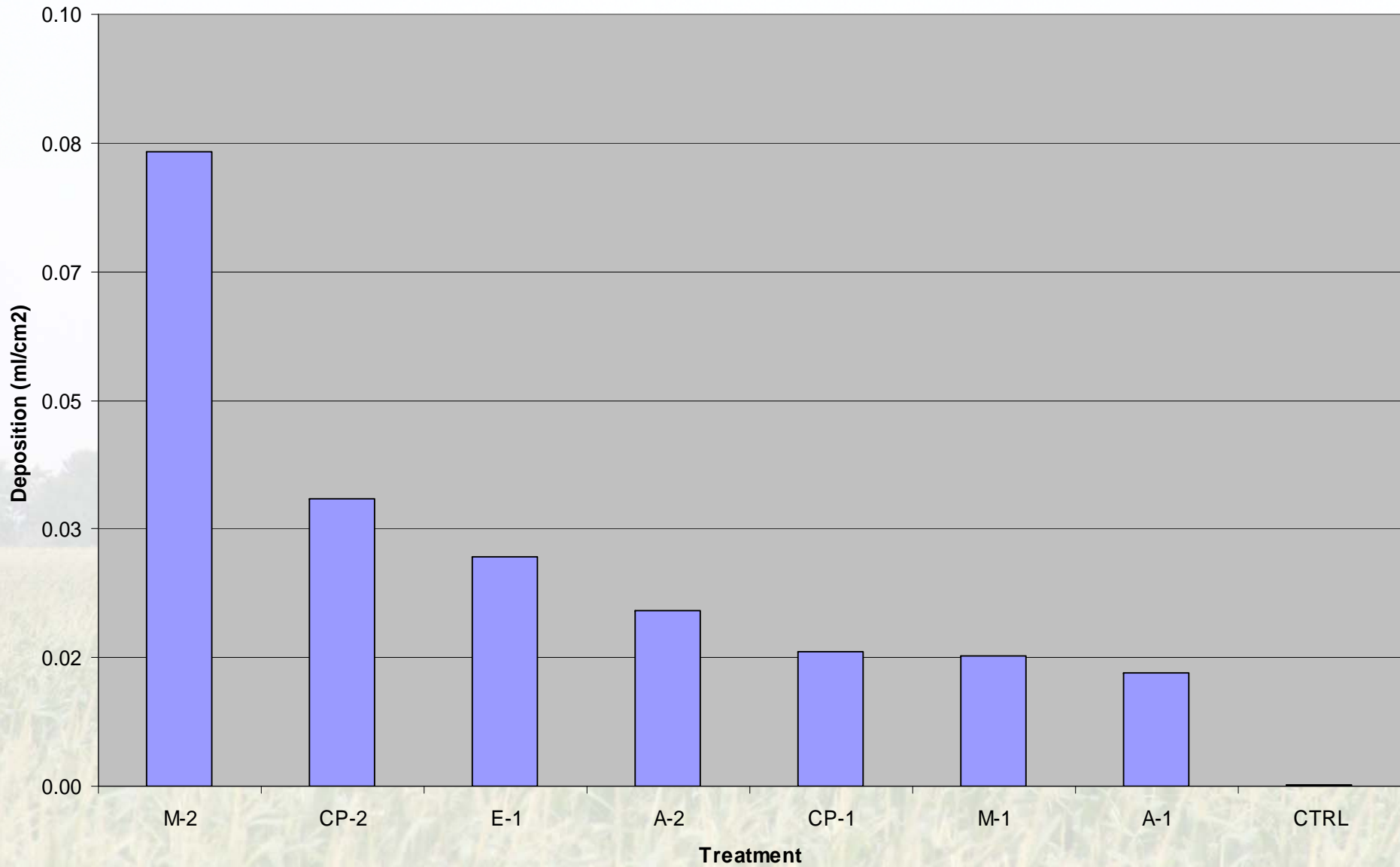
WSP Mid Canopy



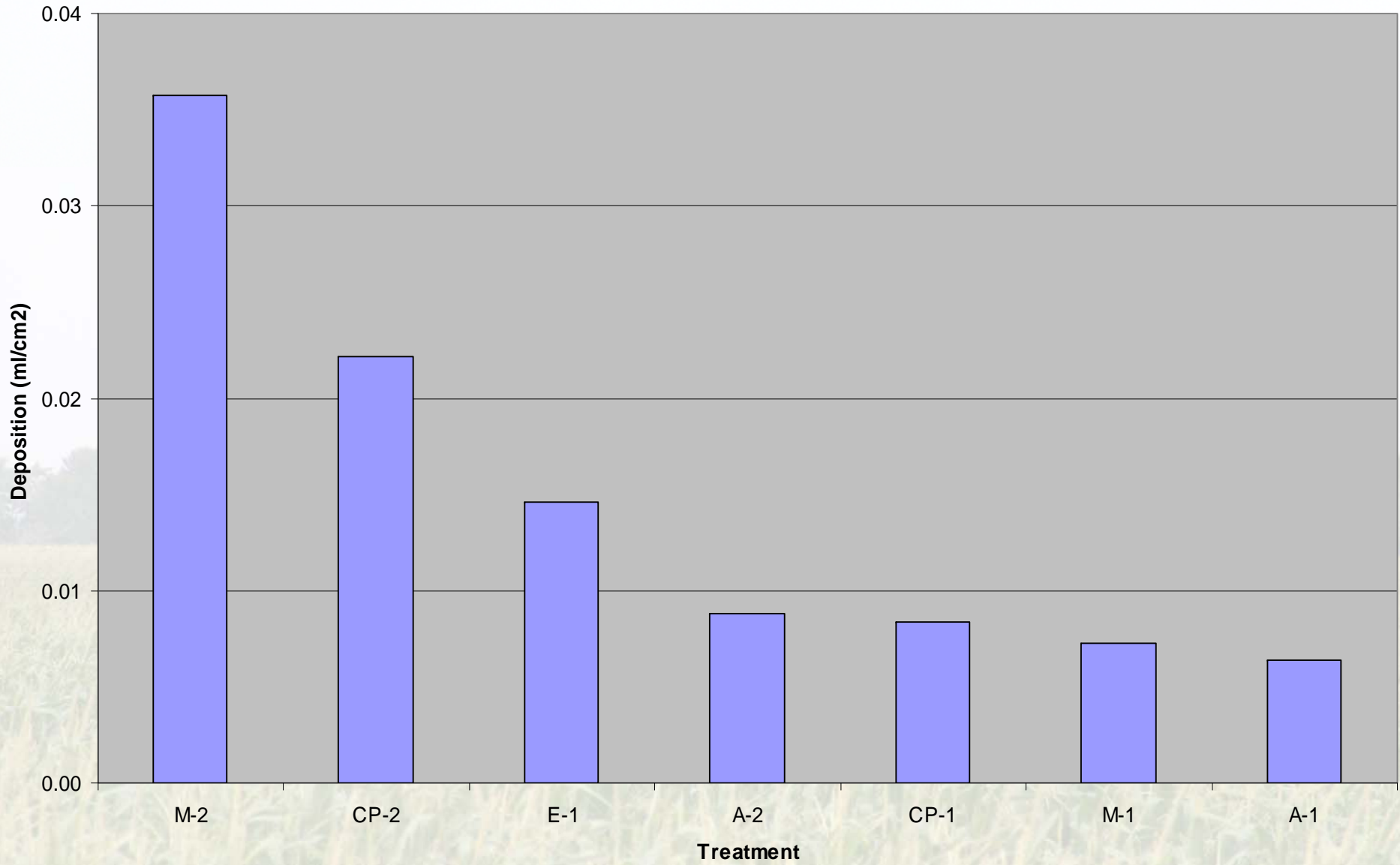
WSP Overall



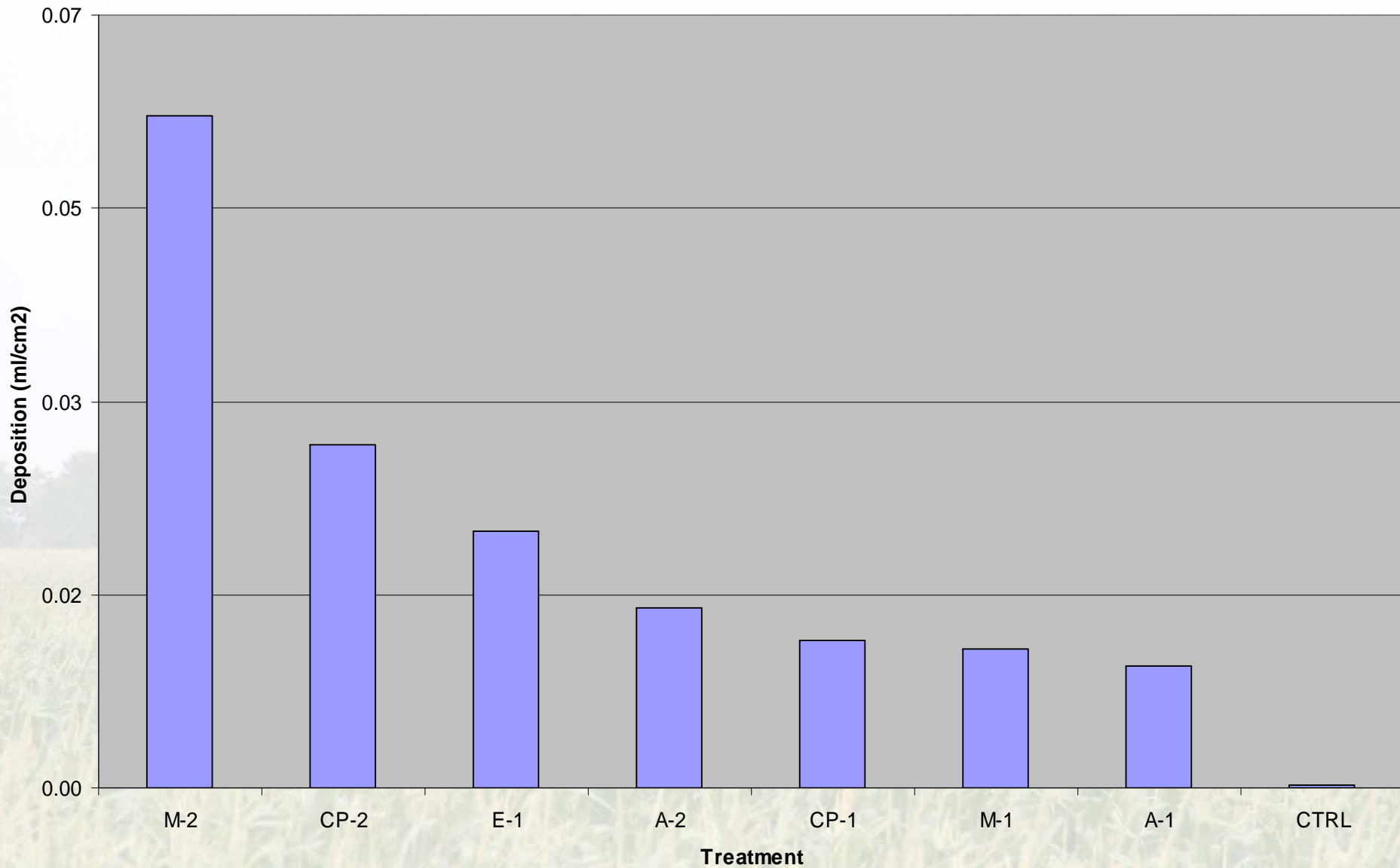
Mylar - Top Canopy



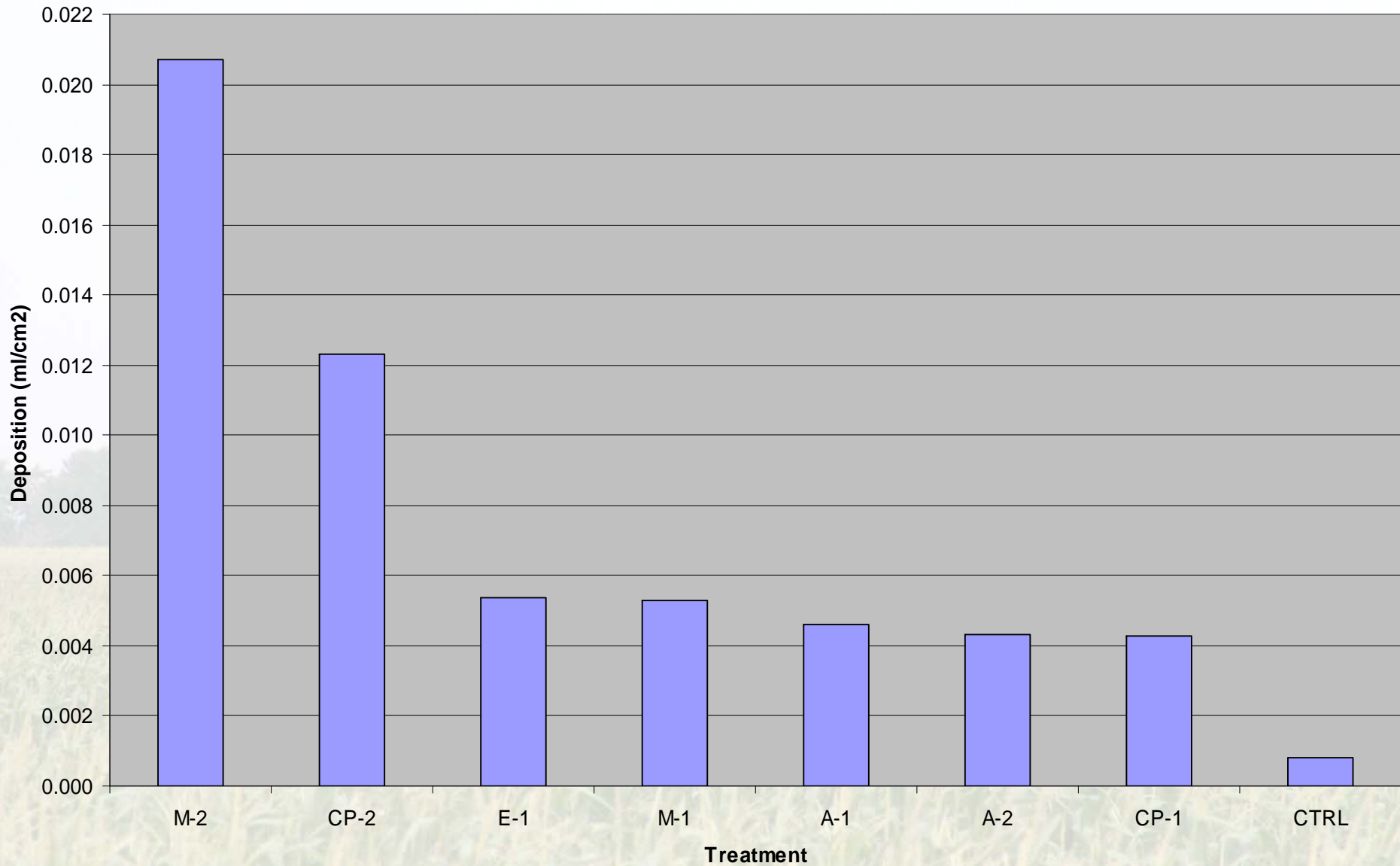
Mylar - Mid Canopy



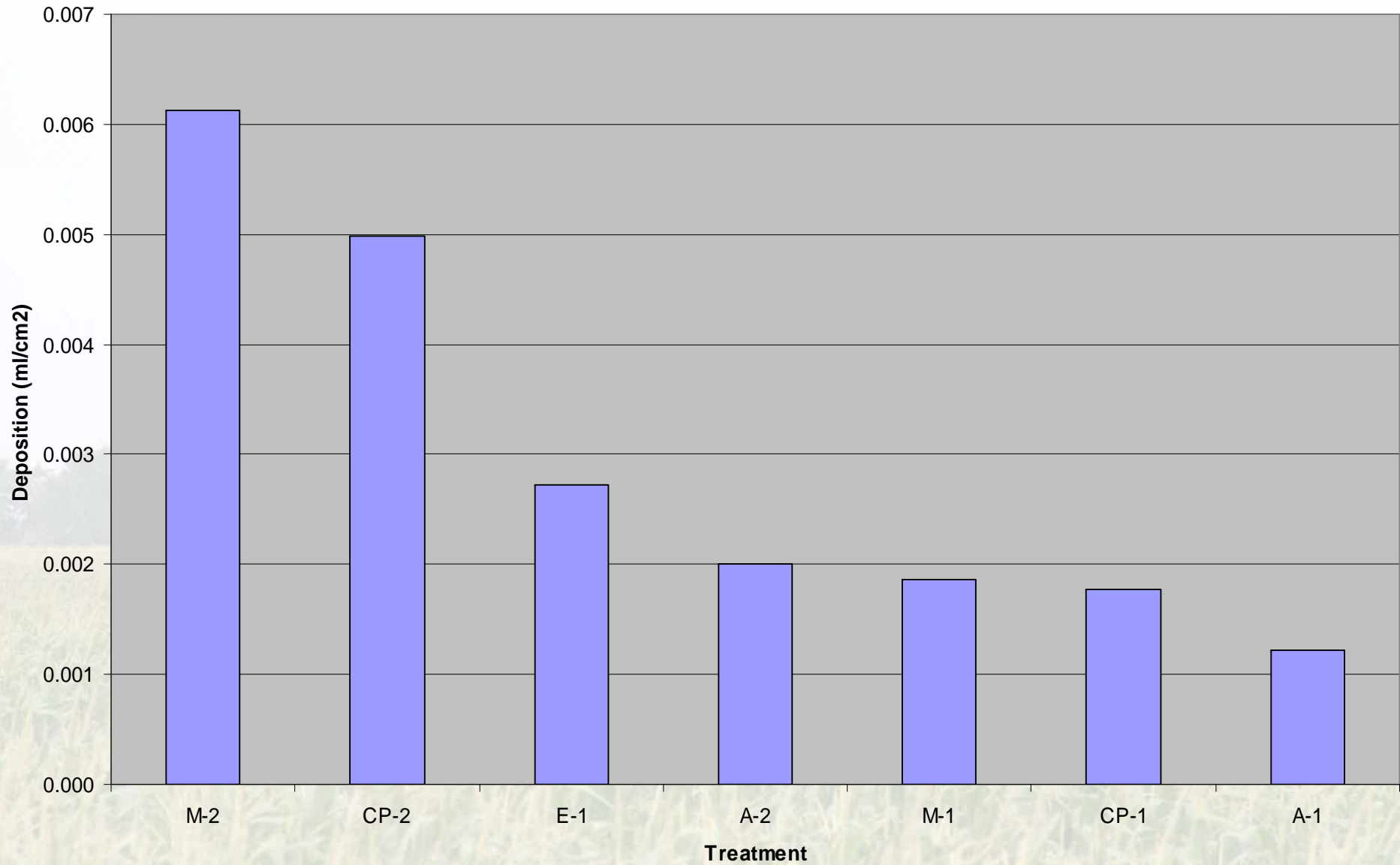
Overall Mylar Deposition



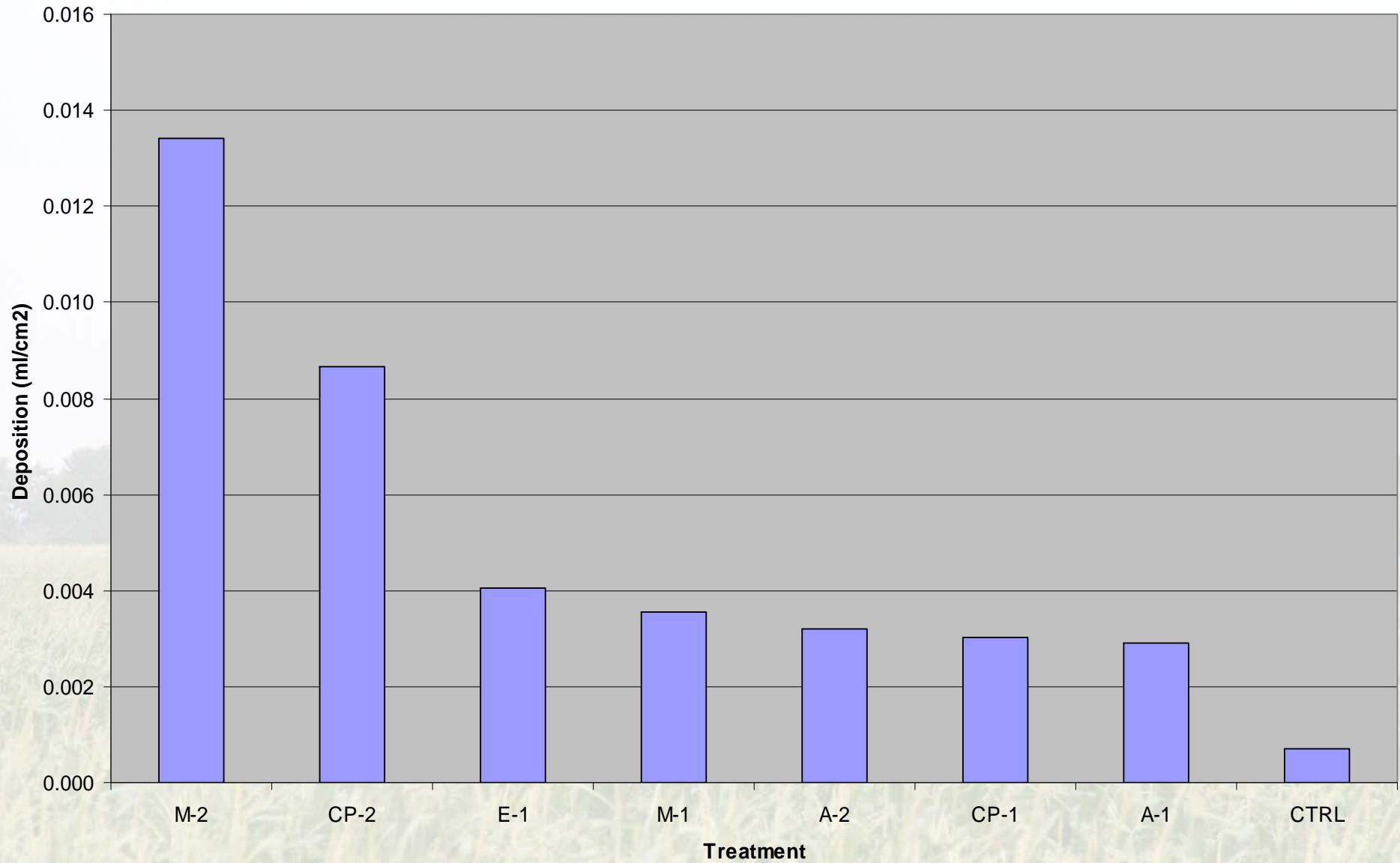
Leaf - Top Canopy



Leaf - Mid Canopy



Leaf - Overall Deposition



Conclusions

- 2 GPA applications provided:
 - More Droplets
 - Better Coverage
 - Larger Droplets
 - More Deposition
- Rotary Atomizer at 2 GPA provide superior coverage
- Electrostatics showed great promise
- Another year of data is necessary
 - ASC/Micronaire
 - Efficacy
 - Confirmation of Results



