

Purdue Extension

Knowledge to Go

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End of Season Irrigation

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<https://engineering.purdue.edu/ABE/Engagement/Irrigation>

<http://www.egr.msu.edu/bae/water/>

<http://msue.anr.msu.edu/resources/irrigation>

End of Season Irrigation

Soybeans - maintain at least 40% available soil water holding capacity until most pods yellow.

Corn - maintain at least 40% of the available soil water holding capacity until the crop reaches black layer.

Late season lack of water results in low test weight corn.



Average water use for CORN in inches/day –adapted From “ Irrigation Scheduling Checkbook Method, Jerry Wright, University of Minnesota, 2002																		
	Week after emergence																	
Temperature	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
50-59	.01	.02	.03	.04	.05	.06	.08	.09	.09	.10	.10	.10	.09	.07	.06	.05	.04	.03
60-69	.02	.03	.04	.06	.08	.09	.11	.12	.13	.15	.14	.14	.13	.11	.09	.07	.06	.04
70-79	.03	.04	.05	.07	.10	.12	.15	.16	.17	.19	.19	.18	.17	.14	.11	.09	.07	.05
80-89	.03	.05	.07	.09	.13	.15	.18	.20	.22	.24	.23	.22	.21	.17	.14	.11	.09	.06
90-99	.04	.06	.08	.11	.15	.18	.21	.24	.26	.28	.27	.26	.25	.20	.17	.13	.11	.07
Corn growth stages		3 leaf			8 leaf			1st tassel	silk		blister kernel			early dent	dent			

Late season lack of water results in under sized soybean in uppermost pods.



Average water use for Soybeans in inches/day –adapted From “ Irrigation Scheduling Checkbook Method, Jerry Wright, University of Minnesota, 2002																	
	Week after emergence																
Temperature	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
50-59	.02	.02	.04	.04	.06	.07	.08	.09	.09	.09	.09	.08	.07	.05	.05	.03	.02
60-69	.02	.03	.05	.07	.09	.10	.11	.13	.13	.13	.13	.11	.10	.08	.07	.04	.02
70-79	.03	.05	.07	.09	.12	.13	.15	.17	.18	.18	.17	.15	.13	.10	.09	.05	.03
80-89	.04	.06	.10	.13	.16	.19	.20	.21	.22	.22	.21	.18	.16	.13	.11	.06	.03
90-99	.05	.07	.11	.14	.17	.20	.22	.25	.26	.26	.25	.22	.19	.16	.13	.08	.05
Soybean growth stages				2 nd trifoliolate		1 st flower			seed filling			leaves yellowing					