

Crop Water Use by Growth Stage – Corn

UNIVERSITY OF
Lincoln®

EXTENSION

Corn Growth Stages

2 leaf (V2): Two collars visible.

4 leaf (V4): Four collars visible.

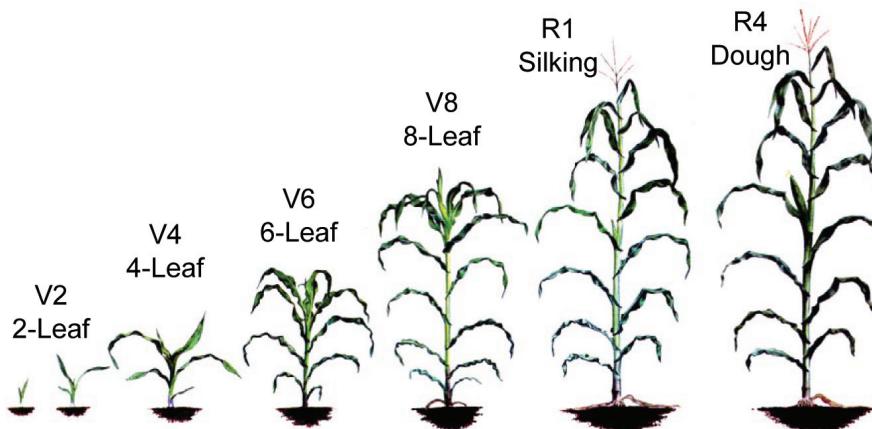
6 leaf (V6): Growing point above ground, tassel forms.*

8 leaf (V8): Ear formation begins.

Silking (R1): Silks are visible outside husk.

Dough (R4): Endosperm milk turns thick and pasty.

* Paint/Mark V6 leaf to make counting easier!



Weekly ETgage® Change in Inches

Crop Stage	Kc	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00	
V2		0.10	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30
V4		0.18	0.18	0.20	0.22	0.23	0.25	0.27	0.29	0.31	0.32	0.34	0.36	0.38	0.40	0.41	0.43	0.45	0.47	0.49	0.50	0.52	0.54
V6		0.35	0.35	0.39	0.42	0.46	0.49	0.53	0.56	0.60	0.63	0.67	0.70	0.74	0.77	0.81	0.84	0.88	0.91	0.95	0.98	1.02	1.05
V8		0.51	0.51	0.56	0.61	0.66	0.71	0.77	0.82	0.87	0.92	0.97	1.02	1.07	1.12	1.17	1.22	1.28	1.33	1.38	1.43	1.48	1.53
V10		0.69	0.69	0.76	0.83	0.90	0.97	1.04	1.10	1.17	1.24	1.31	1.38	1.45	1.52	1.59	1.66	1.73	1.79	1.86	1.93	2.00	2.07
V12		0.88	0.88	0.97	1.06	1.14	1.23	1.32	1.41	1.50	1.58	1.67	1.76	1.85	1.94	2.02	2.11	2.20	2.29	2.38	2.46	2.55	2.64
V14		1.01	1.01	1.11	1.21	1.31	1.41	1.52	1.62	1.72	1.82	1.92	2.02	2.12	2.22	2.32	2.42	2.53	2.63	2.73	2.83	2.93	3.03
V16, Silking, Blister, Dough, Begin Dent.		1.10	1.10	1.21	1.32	1.43	1.54	1.65	1.76	1.87	1.98	2.09	2.20	2.31	2.42	2.53	2.64	2.75	2.86	2.97	3.08	3.19	3.30
Full dent		0.96	0.96	1.06	1.15	1.25	1.34	1.44	1.54	1.63	1.73	1.82	1.92	2.02	2.11	2.21	2.30	2.40	2.50	2.59	2.69	2.78	2.88
Black layer		0.60	0.60	0.66	0.72	0.78	0.84	0.90	0.96	1.02	1.08	1.14	1.20	1.26	1.32	1.38	1.44	1.50	1.56	1.62	1.68	1.74	1.80
Full maturity		0.10	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30

This chart can be used with readings from an ETgage® or other ET reference. First, identify the change in the ET rate across the horizontal row and then identify the current growth stage in the left column. Follow the two columns to the point where they intersect to identify the ET rate to use in your irrigation scheduling. When planning irrigation, account for soil moisture, precipitation, weather conditions, and the ET rate for growth stage of your crop.

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