

ALLEGANY, NEW YORK

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**The maximum plant height seen in the maize subspecies courtesy of tall Tehua accessions;
flowering**

--Karl, JR

There was a delayed, key finding in data reported in 2012. When Chiapas 234 is grown under long night (LN), the qualitative nightlength reaction is precluded by 35 LN (1 mo 3 wk growth), yet quantitative leaf addition lingers through 40 LN, ended by the tassel before 45 LN (2 mo growth) (Figure 1, 2). Fifty nights ensure a normal pollen and silk date; it is ironic that these final required long nights correspond with protrusion of the ear leaf from the whorl.

Figure 1. Quantity of long nights verses leaf quantity & internode length (height of leaf collar 15) in the most-reactive strain of the maize subspecies.

	nights				
	50	45	40	35	30
leaves	23	23	25	26	27
	24	24	25	25	x
	24	24	25	x	x
	25	25	26	x	x
	3	4	3	3	2.5
	height (ft) of leaf collar 15				

Figure 2. Life map of Chiapas 234, the most nightlength-reactive strain of the subspecies.

months	days	events
0	0	imbibition
	7	
	15	
	22	long nights begin - 5th leaf, day 18
1	30	
	37	
	45	
	52	short-night reaction gone - 35 nights, day 53
2	60	tassel present - 45 nights, day 63
	67	pollen and silk set - ear leaf visible, 50 nights, day 68
	75	
	82	
3	90	
	97	pollen begins - day 92-106
	105	
	112	silk begins - day 97-133
4	120	
	127	
	135	
	142	harvest - day 142-178
5	150	
	157	
	165	
	172	
6	180	