10.1.48.223:20

Variety file ID (left to right numbering)

1	2	3	4	5
First Squaring* Adjustment to date of occurrence	Adjustment to specific leaf weight LEAFWT*		Adjustment to root weight in N-deficient soil PDWRT*	
Adjustment to (day/night) root/ shoot ratio 6	Adjustment to fruiting site initiation xms/fbn TI* 7	CDLAYF B_0 constant 8	CDALYF B_1 constant 9	CDLAYF B_2 constant 10
Early FLOSS 11	First BLOOM* Adjustment to date of occurrence from FSQ	Late FLOSS	DEHIScence* Adjustment to date of occurrence from	Adjustment to main stem node initiation MS TI*
Max fraction of square to abscisse DPSMX 16 constant	Maximum fraction of boll to abscisse DPBMX constant	FLOSS Switch constant	Adjustment due to stress day/eve_lfstres* leaf_growth_water_stress	Adjust the boll safe days AGEABZ
PSILIN LF leaf_growth_water_stress constant	PSILIN DZ stem_growt_water_stress constant	NDLAY constant		CDLAYV B_1 constant
21	Minimum LAI affected by boll temperature MIN LAI BOLTMP	Adjustment to vegetative node initiation VEG NODE PFTI*	Adjustment to leaf area expansion DURATION*	Adjustment to leaf age LF AGEFAC
Adjustment to C-allocation of <35 d stems STEM C- 26	Adjustment to C-allocation of >35 d stems STEM C-ALLOC*	Maximum boll size MAX BSIZE genetic potential, g	LL VNO_3C RUTGRO constant	
31	CDLAYV B_2 constant			Adjustment to plant evap. 25 RFEP*
Adjustment to leaf age DROPLF 36	< 35 d PDSTMD (N) constant	Adjustment to initial pre-fruiting leaf area PFLfArea*	Adjustment to initial main stem leaf area XMSLfArea*	Adjustment to initial fruiting leaf area FBLfArea*
Adjustment to initial plant height due to EPI DZ at initiation* 41	Adjustment to internode elongation DURATION*	Adjustment to photosynthesist due to EPI	Adjustment to plant height DZ*	
46	Adjustment to stem height XMNODLTH* NUMPFN < 5	Adjustment to stem height XMNODLTH*	Adjustment to stem height XMNODLTH*	Adjustment to pre-fruiting leaf weight PFDALD/N*
Adjustment to leaf weight PDAMLD/N* 50		Adjustment to square wt PDWSQ* potential_sqr_growth	Adjustment to photosynthesis PSTAND*	Adjustment to boll weight PDWBOD/N*

*Calibration parameters using KR Reddy's new equations.
All calibration parameters denoted as constant cannot be changed.

Example: Variety file India

India

0.90	0.75	0.00	0.70	0.00
1.25	1.00	0.90	-0.22	-2.20
0.75	1.20	2.00	0.95	1.00
0.50	0.50	0.10	1.00	1.00
-0.85	-0.90	1.25	0.00	-0.10
0.00	3.00	1.20	0.95	1.00
0.20	1.00	7.00	.0005	0.00
0.00	-5.50	0.00	0.00	1.00
1.00	35.00	1.00	1.00	1.00
1.00	1.00	1.00	0.90	0.00
0.00	1.00	1.00	1.00	1.00
1.25	0.00	1.00	1.00	3.00

Calibration parameters are numbered from left to right and top to bottom, i.e. calbrt(1) denotes the time to First Squaring from Emergence and calbrt(60) the Adjustment to potential change in boll weight during the day/night, PDWBOD/N.

Calibration parameters that can be changed due to varietal differences are:

Calbrt(1) = date of first square from emergence, FSQ

Calbrt(12) = date of first bloom from FSQ, BLOOM

Calbrt(14) = date of first open boll from BLOOM, DEHISS

Calbrt(15) = Main stem node initiation rate, MSTI

Calbrt(28) = Pre-fruiting node initiation, PFTI

Calbrt(46) = Daily change in plant height at initiation

Calbrt(49) = Daily change in plant height

Adjustments should be made in increments of $\pm$0.05 and within $\pm$1.00. To increase the event, the adjustment/modifier should be positive, otherwise the modifier should be negative.

Other parameters that can be adjusted are:

Calbrt(27) = Minimum LAI that will cause an increase in boll temperature, BOLTMP

Calbrt(33) = Maximum boll size or its genetic potential boll size, grams, BSIZE

<u>These parameters can be adjusted with EXTREME CAUTION:</u>

Calbrt(2) = adjustment to specific leaf weight, LEAFWT

Calbrt(11) = adjustment to fruit loss while green boll weight is $\leq$ 10% of total plant weight, FLOSS

Calbrt(13) = adjustment to fruit loss when green boll weight is > 10% of total plant weight, FLOSS

Calbrt(31) = adjustment to potential stem weight increments $\leq$ 35 days after emergence during the day/night, PDSTMD/N

Calbrt(32) = adjustment to potential stem weight increments > 35 days after emergence during the day/night, PDSTMD/N

Calbrt(55) = adjustment to pre-fruiting leaf weight increments during the day/night, PFDALD/N

Calbrt(56) = adjustment to potential leaf weight increments during the day/night, PDAMLD/N

Calbrt(58) = adjustment to potential square weight increments, PDWSQ

Calbrt(60) = adjustment to potential boll weight increments during the day/night, PDWBOD/N

Calibrat

1 ✓ N-and-C-Delay	31 ✓ Time to open Boll
2 ✓ "	32 ✓ Leaf growth-water-Stress
3 ✓ "	33 ✓ Leaf-growth-water-Stress
4 ✓ "	34 ✓ pt Leaf Area
5 ✓ "	35 ✓ MSLeaf Area / FB Leaf Area
6 ✓ ABCISE	36 ✓ pt Leaf Area / MSLeaf Area
7 ✓ ABCISE	37 ✓ Canopy temp. differential
8 ✓ "	38 ✓ PLTMAPS
9 ✓ "	39 ✓ ABCISE
10 ✓ "	40 ✓ pt Leaf Area / MSLeaf Area
11 ✓ Boll Safe Age	41 ✓ " "
12 ✓ pot-boll-growth/PMAPS	42 ✓ MSLeaf Area
13 ✓ pot-stem-growth	43 ✓ FB Leaf Area
14 ✓ "	44 ✓ plantheight
15 ✓ "	45 ✓ plantheight
16 ✓ Stem-growth-w-[illegible]	46 — ?
17 ✓ potstem-growth	47 ✓ plantheight
18 ✓ pot-boll-growth	48 ✓ plantheight
19 ✓ N-and-C-Delay	49 plantheight
20 ✓ POTRTGRO	50 ✓ TEMPFACT-BOLL
21 ✓ POTRTGRO	51 — ?
22 ✓ root Shoot ratio	52 ✓ fruit growth-water stress
23 ✓ PNET	53 — ?
24 ✓ PNET	54 ✓ ABCISE
25 ✓ ET	55 ✓ ABCISE
26 ✓ P-F-Node TI	56 — ?
27 ✓ Main Stem Node time interval	57 ✓ fruit growth-water-stress
28 ✓ "	88 ?
29 ✓ Time to 1st Square	59 ?

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