



Irish Grain Assurance Scheme

CROP RECORD BOOK

GROWTH STAGES

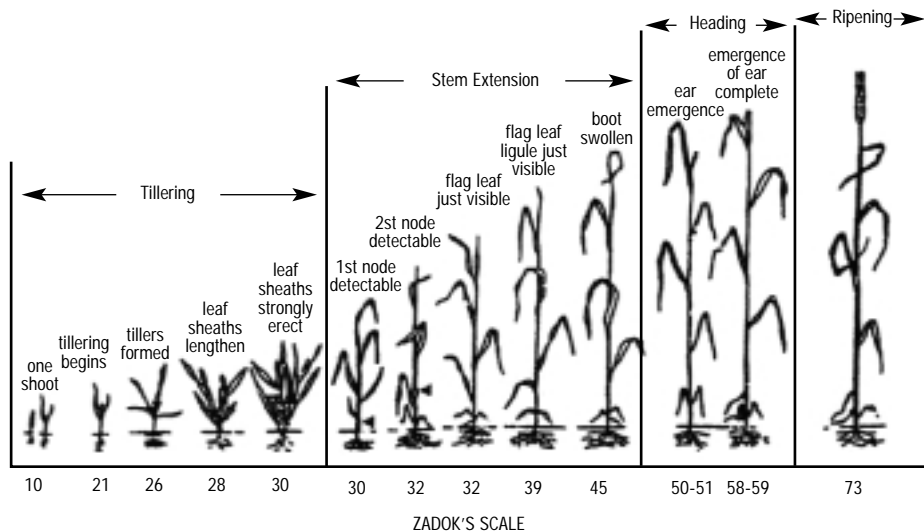
DECIMAL CODE FOR THE GROWTH STAGES OF CEREALS

2-digit code

Germination	Tillering	Booting	Milk development
00 Dry seed	20 Main shoot only	41 Flag leaf sheath extending	71 Caryopsis watery ripe
03 Imbibition complete	21 Main shoot and 1 tiller	43 Boots just visibly swollen	73 Early milk
05 Radicle emerged from caryopsis	22 Main shoot and 2 tillers	45 Boots swollen	75 Medium milk
07 Coleoptile emerged from caryopsis	23 Main shoot and 3 tillers	47 Flag leaf sheath opening	77 Late milk
09 Leaf at coleoptile tip	24 Main shoot and 4 tillers	49 First awns visible	
09 Leaf at coleoptile tip	25 Main shoot and 5 tillers		Dough development
	26 Main shoot and 6 tillers	Inflorescence	83 Early dough
	27 Main shoot and 7 tillers	51 First spikelet of inflorescence just visible	85 Soft dough
	28 Main shoot and 8 tillers	52 1/4 of inflorescence emerged	87 Hard dough
Seeding Growth	29 Main shoot and 9 or more tillers	55 1/2 of inflorescence emerged	Ripening
B10 First leaf through coleoptile		57 3/4 of inflorescence emerged	91 Caryopsis hard (difficult to divide by thumb-nail)
11 First leaf unfolded	Stem elongation	59 Inflorescence completed	92 Caryopsis hard (can no longer be dented by thumb-nail)
12 2 leaves unfolded	30 Ear at 1cm		93 Caryopsis loosening in daytime
13 3 leaves unfolded	31 1st node detectable	Anthesis	
14 4 leaves unfolded	32 2nd node detectable	60 } Beginning of anthesis	
15 5 leaves unfolded	33 3rd node detectable	61 } Beginning of anthesis	
16 6 leaves unfolded	34 4th node detectable	64 } Anthesis half-way	
17 7 leaves unfolded	35 5th node detectable	65 } Anthesis half-way	
18 8 leaves unfolded	36 6th node detectable	68 } Anthesis complete	
19 9 or more leaves unfolded	37 Flag leaf just visible	69 } Anthesis complete	
	39 Flag leaf ligule/collar just visible		

Reference: Tattman D.R. Brad H. (1987) Decimal Code for the Growth Stages of Cereals. Annals of Applied Biology 110.683-687

GROWTH STAGES IN CEREALS



CONVERSION FACTORS

The following conversion factors are reproduced in good faith but IGAS cannot accept any responsibility for errors arising from their use.

Multiply the units in the left-hand column by the conversion factor in the middle column to obtain the units in the right-hand column. For example, to convert acres to hectares, multiply the number of acres by 0.4047 to obtain the number of hectares.

e.g. 10 acres = 4 hectares

MULTIPLY	BY	TO OBTAIN
Acres	0.4047	Hectares
Square feet	0.0929	Square metres
Square yards	0.8361	Square metres
Feet	0.3048	Metres
Inches	2.54	Centimetres
Yards	0.9144	Metres
Feet per second	0.6818	Miles per hour
Miles per hour	1.610	Kilometres per hour
Pounds	0.4536	Kilograms
Pounds per acre	1.121	Kilograms per hectare
Hundredweights (cwt) per acre	125.5	Kilograms per hectare
Stones per acre	15.7	Kilograms per hectare
Pounds per square inch	0.069	Bars
Pints	0.5683	Litres
Pints per acre	1.404	Litres per hectare
Fluid ounces per acre	0.0702	Litres per hectare
Gallons	4.546	Litres
Gallons per acre	11.23	Litres per hectare



Crop Record Book

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IGAS/CRB Ver. 2

CROP / FIELD RECORD

CROP DETAILS

FIELD/BLOCK NAME Hill Field AREA 12 acre
 CROP SOWN W. Wheat VARIETY Madrigal
 LPIS NO. 1101 12011 SOWING DATE 15 Oct 20 04
 LAST CROP W. Wheat SEEDING RATE 8 1/2 St/Ac
 SEED SUPPLIER Merchant Name SEED LOT NO. 97118

HARVEST DETAILS

HARVEST DATE 17/18 August 2004 SOLD TO Buyer Name
 SOLD FOR Malting Seed Milling Feed Other _____
 DEL DATE 17/18 August TONNAGE DEL 51 tonne DEL BY Self

FERTILISER APPLICATION

Please specify RATE: Acre Hectare (tick one box only)

DATE	G.S.	COMPOUND USED	RATE USED	TOTAL UNITS APPLIED
14/10	_____	0 : 4 : 40	2 1/2 bags	0 : 10 : 100
28/02	28	27 N + 3 S	1 1/2 bags	40 : 10 : 100
26/03	31	27 N + 3 S	1 bag	67 : 10 : 100
23/04	37	27 N + 3 S	1 bag	94 : 10 : 100
10/06	51	27 N + 3 S	3 bag	175 : 10 : 100

CROP / FIELD RECORD

CHEMICAL APPLICATION

Please specify RATE: Acre Hectare (tick one box only)

DATE	G.S.	PRODUCT	RATE	REASON FOR USE	COMMENTS
22/11	16	Herbicide Name	1.0	Weeds	Broken nozzle
		Herbicide Name	1.0	Weeds	- repaired pipe
		Aphicide Name	0.15	Aphids	
10/03	30	Growth Reg	1.25	Shorten Straw	
03/04	31	Fungicide Name	0.5	Disease	Dew on
		Fungicide Name	0.3	Disease	Crop
		Trace Element	1.0	Nutrition	
04/05	39	Fungicide Name	0.6	Disease	Cool
		Fungicide Name	0.6	Disease	Breezy
10/06	51	Fungicide Name	0.7	Disease	Septoria
		Fungicide Name	0.8	Disease	Active

