Crop Formation: Overton Hants, UK 1995

Laboratory Code: KS-02-156

Material: Rape or Canola, *Brassica napus*.

Formation: May 13,1995 at Overton Hants, England

Sampled: by Shelly Keel, on May 18, 1995

Comment: Tissue in excellent condition at arrival in lab.

SUMMARY OF RESEARCH FINDINGS:

a)- statistical study conducted to determine differences, if any, in seed pod size distributions.

b)- lengths determined in 100 pods located in the apical 25 cm of five randomly selected plants from each test series (600 total measurements).

c)- frequency distribution analyses conducted as previously described.

d)- in Fig.1 attached are the inserted values of the pod size changes relative to the mean of the controls.

e)- when comparing variations about the mean of the controls the three control sets have a maximum 9% variation from the mean and the formation samples a 29% variation.

f)- all three formation samples are significantly reduced in pod size relative to the normal control plants.

CONCLUSIONS

At this point in the plant development the pods are developing rapidly. The above data clearly indicate that the pod development was severely reduced by the formation energies, whereas the pods on the controls continued to lengthen during the five day interval between formation and sample collection.

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(1A)

FIG.1 (KS-02-156)

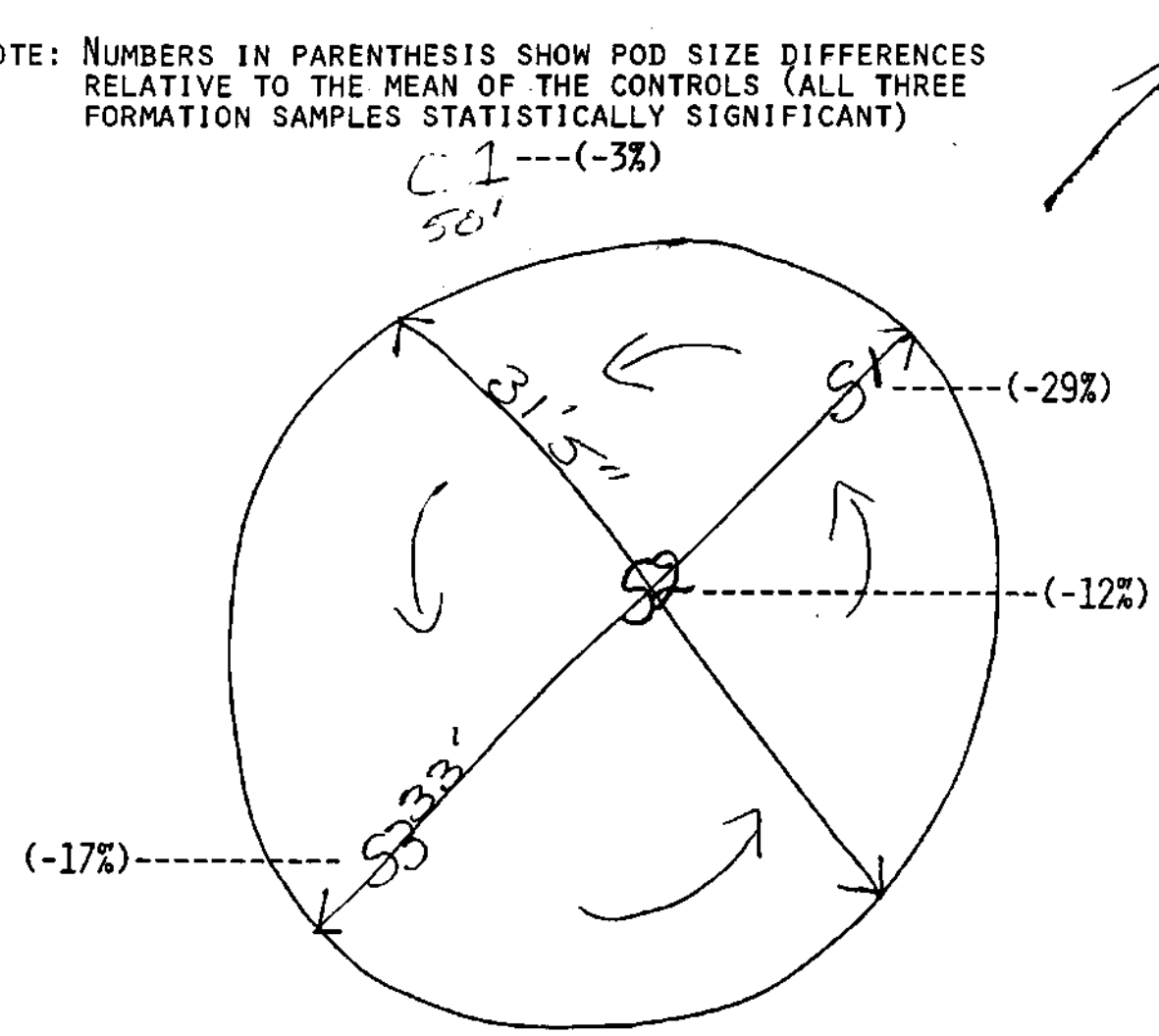
FIELD DRAWING

Formation Location: OVERTON, HANTS. U.K. (B3051)

Date Sampled: 18 May 1995

Your Name: Shelly Keel

NOTE: NUMBERS IN PARENTHESIS SHOW POD SIZE DIFFERENCES RELATIVE TO THE MEAN OF THE CONTROLS (ALL THREE FORMATION SAMPLES STATISTICALLY SIGNIFICANT)

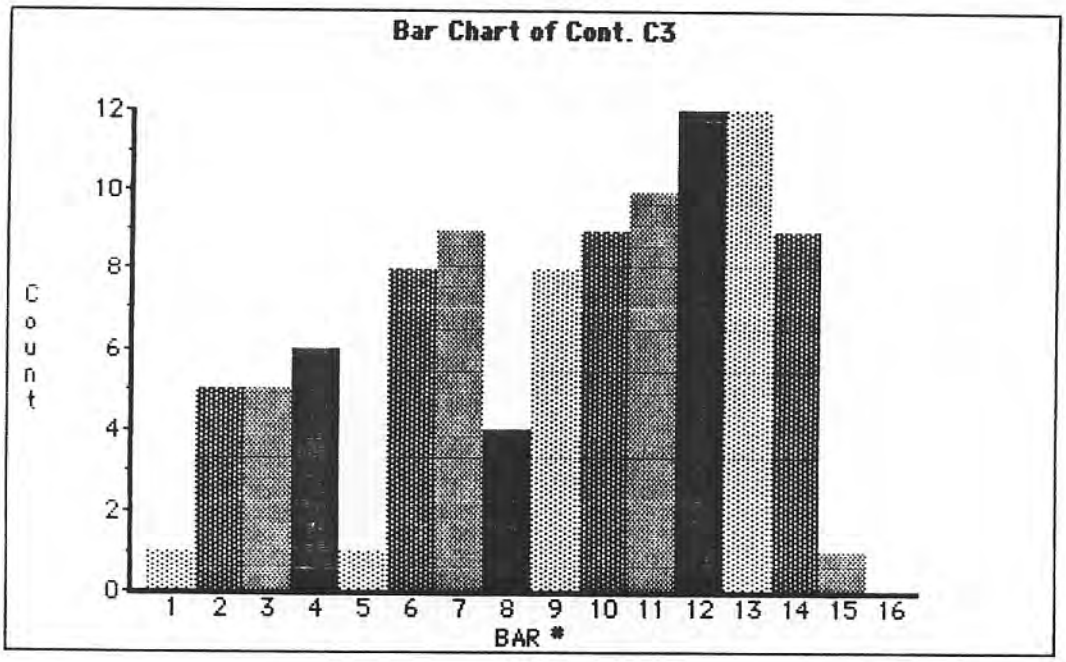


Anti Clockwise Swirl.

Centre swirl was in the centre and it measured 3'4".

NOTE: DO NOT FORGET COMPASS BEARING

Fig.2 Frequency distribution analysis of pod size in control (KS-02-156)

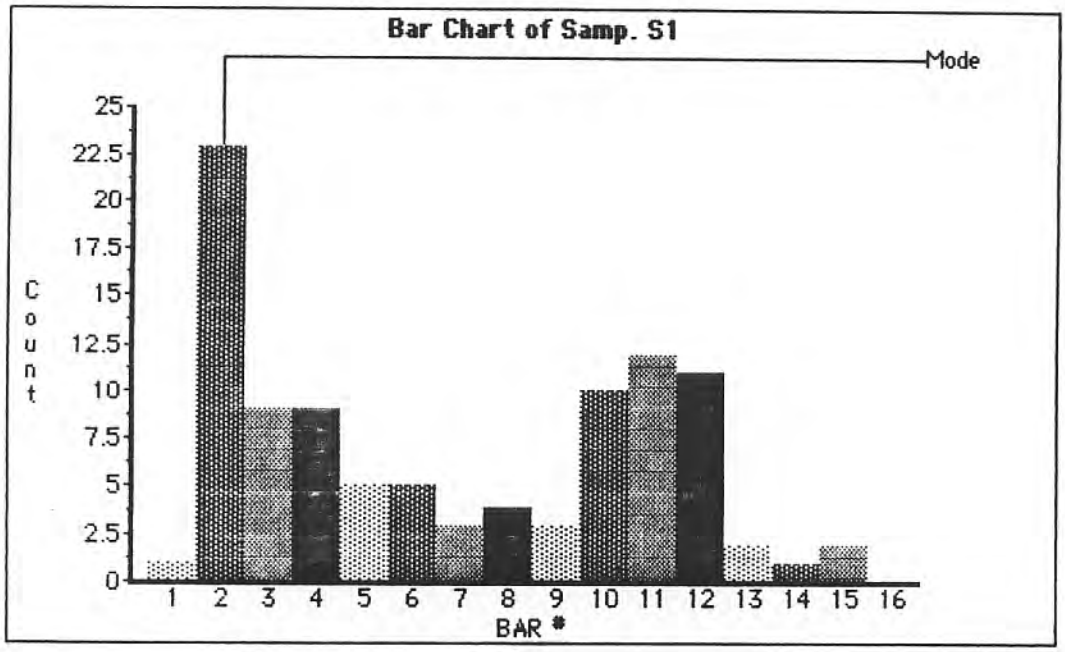


BAR# = 0.5 CM POD LENGTH INTERVAL

Cont. C3

Mean:	Std. Dev.:	Std. Error:	Variance:	Coef. Var.:	Count:
4.362	1.87	.187	3.498	42.879	100
Minimum:	**Maximum:**	**Range:**	**Sum:**	**Sum Squared:**	**# Missing:**
.1	7.3	7.2	436.2	2249.04	0
Kurtosis:	**Skewness:**				
-.925	-.461				

Fig.3 Frequency distribution analysis of pod size in formation plants (KS-02-156)



BAR# = 0.5 CM POD LENGTH INTERVAL

Samp. S1

Mean:	Std. Dev.:	Std. Error:	Variance:	Coef. Var.:	Count:
3.192	2.063	.206	4.255	64.622	100
Minimum:	**Maximum:**	**Range:**	**Sum:**	**Sum Squared:**	**# Missing:**
.4	7.4	7	319.2	1440.12	0
Kurtosis:	**Skewness:**				
-1.444	.203				