

Crop Formation: Watertown, South Dakota, USA

Laboratory Code: KS-03-136

Material: wheat heads and stems, *Triticum aestivum*

Date Formed: Week of July 30 - August 7, 1996

Date Found: August 8, 1996

Date sampled: August 23, 1996, by Harold L. Hansen (local Agricultural Service field agent), Henry, S.D.

Formation: Complex design of pathways (3-4 ft. wide) forming circles, lines, a triangle, semi-circles and a box shape. Overall dimensions: 169 by 93 ft. Crop is downed in a pie-shaped wedge in the large circle at S17, in a semi-circle at S21 and in a box shape at S28, otherwise crop is standing.

SUMMARY OF RESEARCH FINDINGS:

- a) Mr. Hansen's field sampling diagram is shown in Fig. 1.
- b) a total of 29 formation and 6 control sets were examined.
- c) each set contained between 15 and 25 plants. Sample populations of this size allow reliable statistical comparisons.
- d) the apical node length data were obtained in the usual manner.
- e) the bar chart in Fig. 2 summarizes the node length (N1) changes in each of the six control samples compared with the mean of the 106 control plants. On a random basis one would expect half of the controls to show positive values and half to show negative, and as seen this is exactly the case here.
- f) node length changes in Fig. 3 show the degree of alteration in the downed plants within the formation. The S-numbers along the horizontal axis relate to the sampling diagram in Fig. 1. As in Fig. 2 the "node change" is the percent change in node length relative to the mean node length for all of the 106 control samples.
- g) a statistical analysis showed that all of the samples from the downed regions had significantly expanded nodes at the 99% level of confidence ($P < 0.01$), whereas none of the control sets was significantly different than the mean value.
- h) in Fig. 4 the bar chart gives the results from the node measurements in the upright plants within the confines of the formation. None of the upright sample sets is significantly altered when statistically compared with the control level.

COMMENTS:

The significant and relatively uniform node expansion in the downed samples clearly demonstrates that an external energy source produced these pathway type formations. In the scientific literature a 95% level of confidence is considered statistically significant. Here we find that the downed sample sets are at or above the 99% level of confidence and may therefore be termed highly significant. Furthermore these energies were confined strictly to the downed crop within the formation (as shown in Fig.s 2,3,4) with none of the upright plants sampled within the formation disclosing significant node alterations.

In past reports and scientific papers we have consistently demonstrated that the type of node expansions observed here cannot be produced by human intervention, by chemicals such as herbicides or through over fertilization. On the other hand, the data we have accumulated over a several year study is consistent with a model based on the natural formation of ion plasma vortices containing internal microwave energies which produce very rapid transient heating within the cellular matrix at the plant stem node regions.

Germination studies on seeds from the formation and control plants will be conducted after taking the seeds out of dormancy. Results of the seed study will be reported when the data are available.

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Fig.1 Mr. Harold Hansen's sampling diagram for crop formation
 KS-03-136 (dots on lines are where samples were taken in paths).

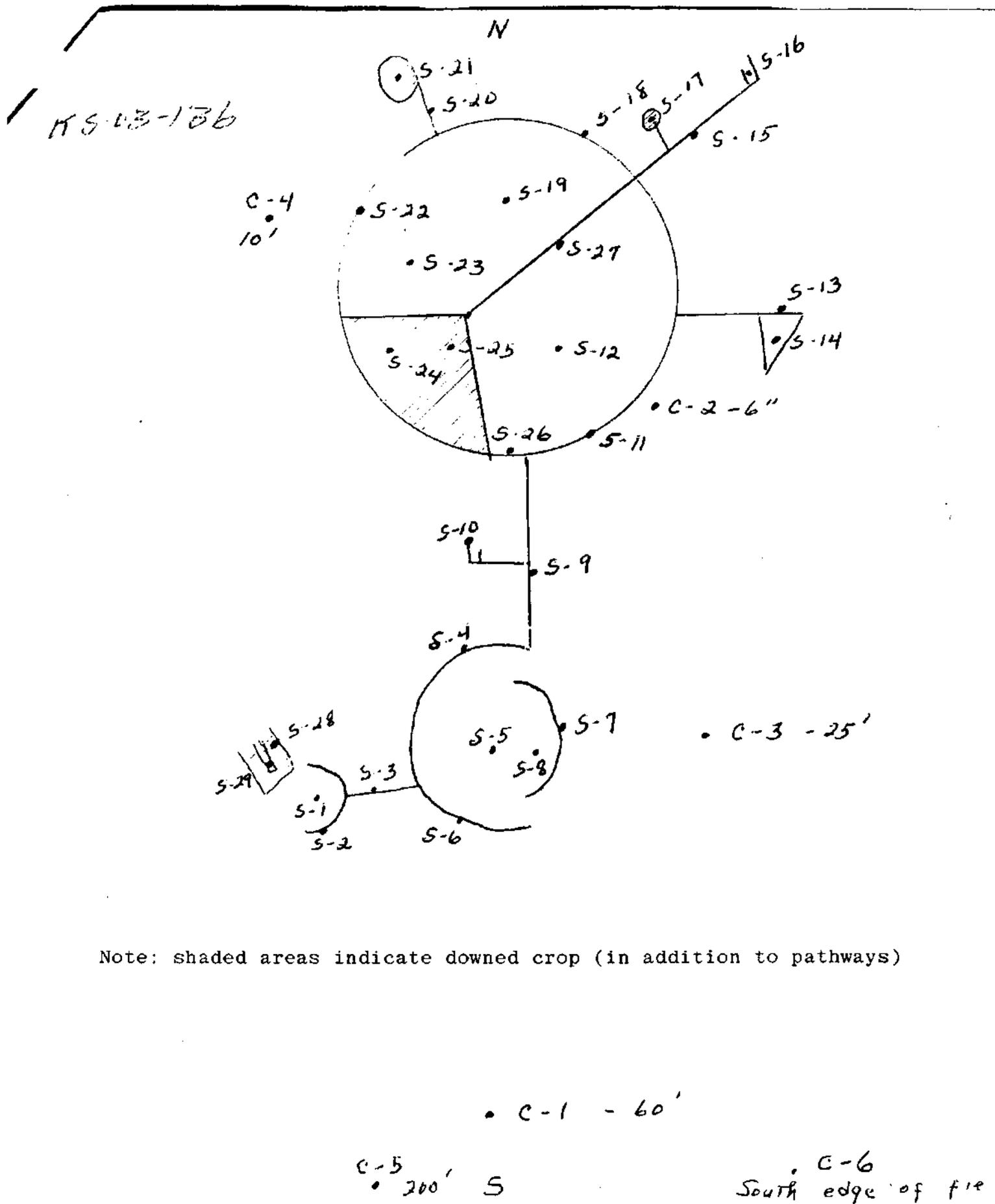
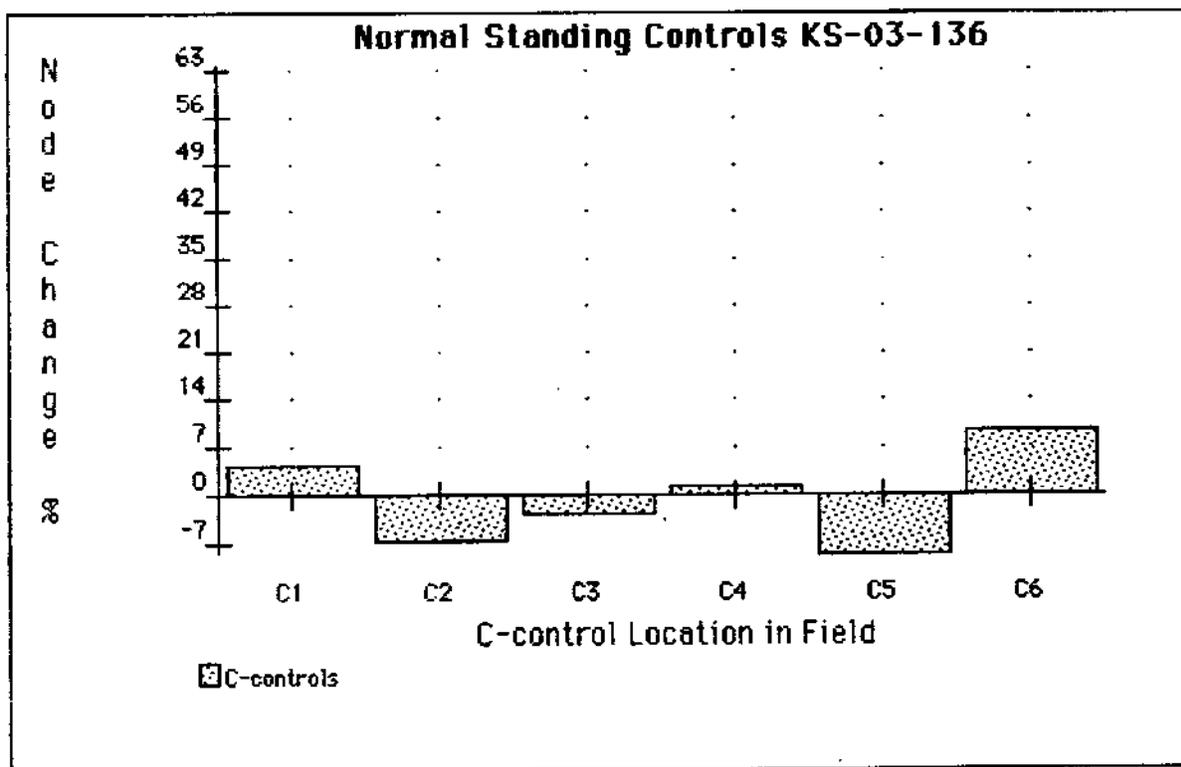


Fig.2 Node length changes in normal or control plants compared with the mean value for all the 106 control (standing) samples.



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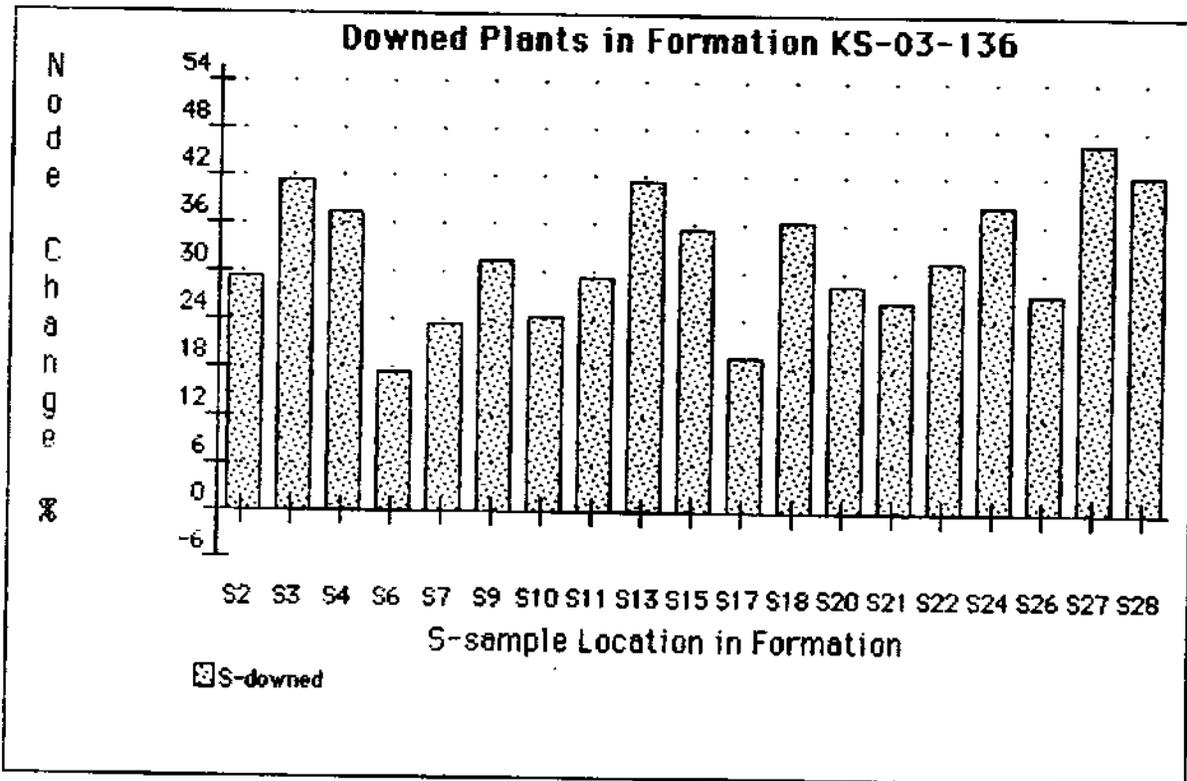


Fig.3 Comparison of node expansion in downed plants with upright, normal control plants.

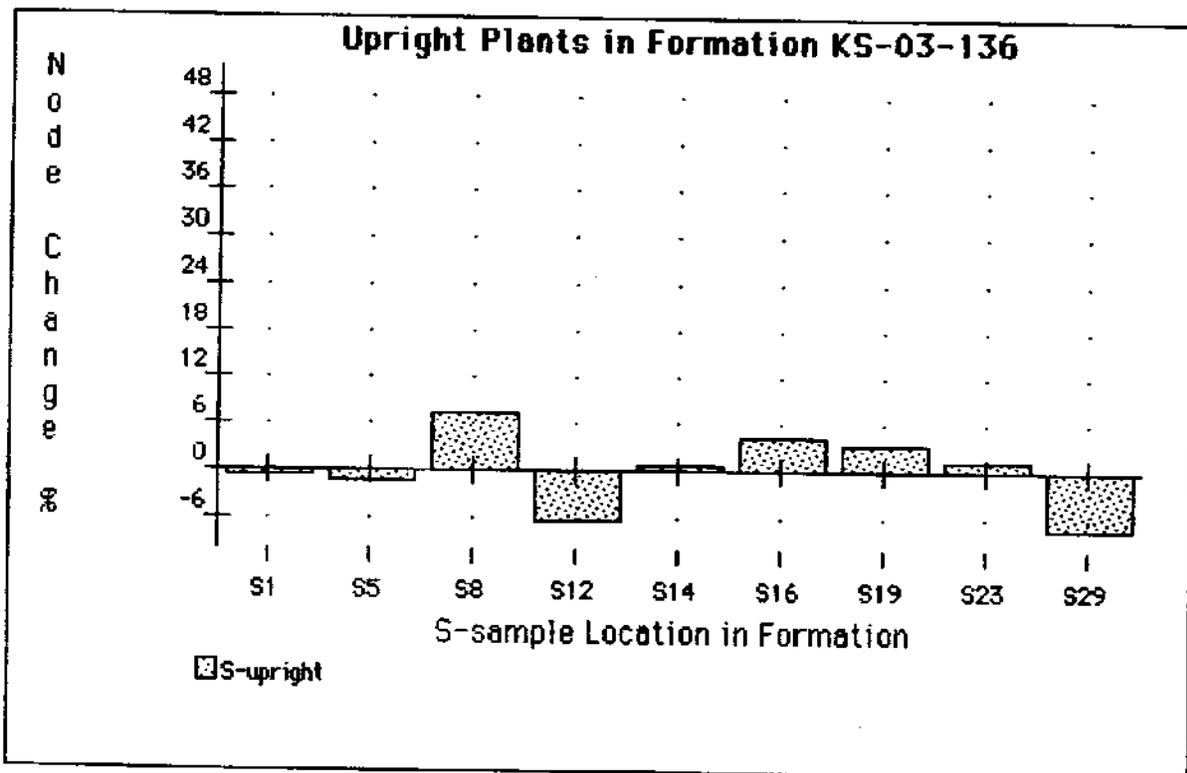


Fig.4 Node length changes in upright, formation samples relative to normal control plants. None of the sample sets is significantly altered relative to the controls.