

Crop Formation: Grass Lake, Michigan 1995

Laboratory Code: KS-03-06

Material: Wheat stems and heads, *Triticum aestivum*

Formation: Irregular shaped formations located east of Grass Lake, Michigan. Date of formation not known - found by Mr. John Vance on July 12, 1995. These formations were considered by the farmer-owner to be "wind damage".

Sampled: by John Vance and WCL on July 15, 1995

SUMMARY OF RESEARCH FINDINGS:

a)- a rough sketch of the Maute Rd. formations and sampling locations is presented in Fig.1 attached. The values listed in parenthesis give the percent change in the apical node lengths relative to the mean level in the control nodes (see values in the figure caption)

b)- in Fig.1 all apical node length data from plants within the formation are significant at the $P < 0.05$ level.

c)- the penultimate node data did not disclose the high degree of expansion observed in the ovoid formation discussed in Report No. 62; however they were significantly expanded relative

d)- the node expansion in the upright plants (sample M2-1) were as severe as in the downed plants.

e)- expulsion cavities and lateral splits were found in downed sample M2-2 only.

f)- germination tests revealed a significant reduction in the germination and viability of seeds from the formation material (both standing and downed plants).

COMMENTS

The significant node length increases in all the formation samples and the reduction in seed viability, strongly suggest the presence of energetic ion plasma vortices as a causative force within these formations.

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Fig.1 Irregular crop formation near Grass Lake, Michigan, 1995 (percent changes in node length given in parenthesis are relative to the mean node length of all controls; 2.42 mm with s.d. 0.45 and N=37 plants-data at apical position)

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