

Crop Formation: Lawrence, New Jersey - 1997

Lab. Code: KS-04-38

Event Location: Paul Bryan farm, Lawrenceville-Pennington Road, Lawrence, NJ

Date Occurred: July 3, 1997 (?)

Date Discovered: July 4, 1997

Date Sampled: July 12 and July 15, 1997

Material Sampled: Oats (*Avena sativa*) and soils

Sampled By: Linda Howe (July 12) and Bill Zola (July 15)

Formation Characteristics: Two circles with associated pathways, arcs and half-circle, overall length approx. 200 ft. Center circle 34', smaller (to the north) circle 18', half-circle (to the south) 6', pathways 39' x 4', arcs 58' x 4' (approximate measurements).

Relevant Findings:

- (1) **Statistically-significant node-length changes were found in the downed-plant stems within the formation;** detailed measurements disclosed node-expansion levels ranging from a +27% to +98% increase, relative to control plants sampled 200 ft. away. These expansion levels are well outside the range expected from gravitropic responses.¹
- (2) **Standing plants immediately adjacent to the downed areas (6 in. to 1 ft. outside) also disclosed statistically-significant node expansions;** the standing-sample group found to have the greatest expansion level (+39%) was adjacent to the small half-circle at the southern end of the formation.
- (3) **The four sets of control plants (139 plants total) taken at 200' distances away from the formation all showed very little node-length variation;** control plant node-length measurements ranged from -2% to +5% variation from the mean. This minimal variation among the control plants strengthens the significance of the sample set data.
- (4) **Redox² studies carried out on germinating seeds disclosed evidence of mitochondrial damage (altered respiration patterns) in seeds taken from several downed-crop formation sites;** these altered respiration patterns are indicative of exposure to damaging radiation (microwaves).
- (5) **No expulsion cavities were found in the formation or control sample plants.**
- (6) **No magnetic material was found in the 18 soil samples and controls examined.**

Results and Discussion:

The mean node length within each formation sample set (7 to 12 plants per set) was compared to the mean node length value from the four control sets taken 200 ft. away (North, South, East, West) from the downed-crop area. These values (expressed as percent node-length change) are listed on the field sampling diagram (Fig. 1). The majority of the downed plants (Mr. Zola's samples) were taken at 6 in. to 1 ft. inside the designated areas of the formation, and the standing plant samples at 6 in. to 1 ft. outside. Ms. Howe was not certain about the distances at which her four samples were taken, but believes them to have been taken closer to the northwest side of the formation than elsewhere.

Node expansion levels in both the downed and standing plants immediately outside the formation (16 out of 17 sample sets actually delivered to the lab) clearly demonstrate that energetic plasma vortex energies were involved in this formation. From our 1997 Control Study¹ it is obvious that the node expansion differences here (in the range of 30-100%) cannot be explained by gravitropic (the response of plants to the force of gravity) effects. Node expansions in the standing perimeter plants, at levels greater than about 15%, indicate a "spillover" effect--probably in a very limited region outside the downed-crop areas.

Fig. 2 shows three sets of redox² respiration data taken during the first six hours of seed germination. The heavy solid line (squares) and the heavy broken line (diamonds) plot the data obtained from control seeds and are typical of responses regularly obtained from normal, respiring oat seeds. The light dashed line (triangles, in red) plots the data obtained from seeds taken from standing plants immediately outside the 18' diameter circle at the North end of the formation. For the first 2.5 hrs. of imbibition the redox ratio cycles are similar in all three test samples; after this point, however, the ratio becomes much higher in the standing plant sample and does not display the large, normal, fluctuations and subsequent return to a low level (below an Rr of 0.2) which is observed in the controls. This indicates an abnormal level of free-radical release from the mitochondria, which is due to injury to the plant cells. Previous studies have shown that this type of injury can be simulated by exposing the plant tissues to microwave radiation.³

The redox tests are very time-consuming; therefore only six formation and two control samples were examined. However, high ratios were also observed in a downed plant sample taken from sampling location S-6.

It is of interest to note, also, that Mr. Zola observed clear compass anomalies in the largest circle in the formation. He reports that the needle of his field compass, after sitting on the ground for 15 minutes near the center of this 34' circle, was pinned to the West, and that later after picking it up and placing it back on the ground, it was pinned to the East. He further notes that the compass now (2-1/2 yrs. later) demonstrates apparent reversed polarity, in that the needle points South.

¹Gravitropic Responses in Simulated Crop Formations, 1997, BLT Report #86, 10/14/97.

²Levengood, W.C. (1998) "Redox-responsive electrodes applied during plant morphogenesis," *Bioelectrochemistry and Bioenergetics*, 19:461-476.

³A Study of Bovine Excision Sites from 1993 to 1997, BLT Report Red. #06, 10/8/97.

Fig. 1: Field-sampling diagram (KS-04-38), showing mean node-lengths found in formation sample & control plants.

LOCATION: Lawrenceville, New Jersey

DATE OCCURRED: 7/3/97 (?) FOUND: 7/4/97

DATE SAMPLED: July 12 & July 15, 1997

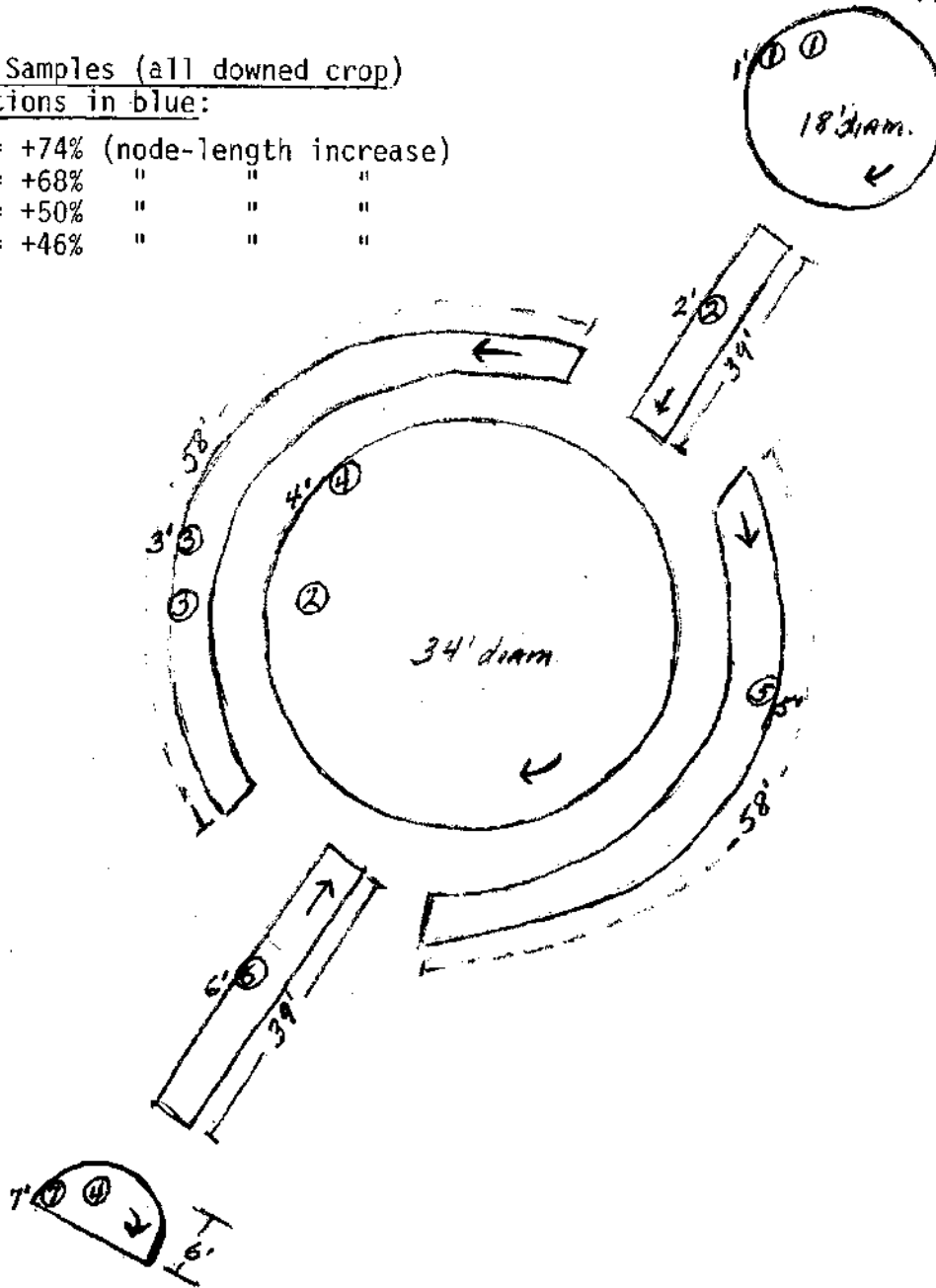
MATERIALS SAMPLED: crop, soils CROP: Oats
 Linda Howe (7/12-4 Ss)

SAMPLED BY: Bill Zola (7/15-14Ss, 4

PHONE: 609/409-2620 (Zola)

Howe Samples (all downed crop)
 locations in blue:

- S-1 = +74% (node-length increase)
- S-2 = +68% " " "
- S-3 = +50% " " "
- S-4 = +46% " " "



Zola Samples (downed and standing crop, in green):

- S-1 = 1' inside downed, +98%
- S-2 = not submitted
- S-3 = 1' inside downed, +76%
- S-4 = 1' inside downed, +42%
- S-5 = 1' inside downed, +50%
- S-6 = 1' inside downed, +71%
- S-7 = 1' inside downed, +27%
- S-1' = standing edge, +31%
- S-2' = " " , +18%
- S-3' = " " , +16%
- S-4' = " " , -2%
- S-5' = " " , +18%
- S-6' = " " , +35%
- S-7' = " " , +39%

Zola Controls: (all 200' distant, in standing crop)

- C-North (27 plants) = -3%
- C-South (33 plants) = +5%
- C-East (67 plants) = -2%
- C-West (12 plants) = +1%

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Note: Lay of crop indicated by arrows inside downed-crop areas.

Fig. 2: Redox (seed respiration) Data on Two Control Sets a One Sample from Standing Plants Immediately Outside 18' Diameter North Circle. Red dashed line (with triangles) shows significantly altered respiration rate in sample seeds, indicating abnormal levels of free-radical release from cell mitochondria.

Evidence of Mitochondrial Damage in Oat Seeds Crop Formation: New Jersey 1997 (KS-04-38)

