Crop Formation: Pease, Minnesota, 1996

Laboratory Code: KS-03-164
Material: Mature corn stalks and ears *(Zea mays)*.
Formed: First seen Sept. 5, 1996.
Sampled: Oct. 2, 1996, by Bob Schultz and Tex Ritter, MN
Formation Characteristics: Details given in Fig.1.

Relevant Findings:

1) - significant reduction in ear length (-12.8%) in samples taken from the formation.
2) - significant reduction in seed weight (-37.0%) within formation.
3) - significant reduction in seedling growth (-27.5%) from seeds within the formation.
4) - soil samples contained higher than normal concentrations of magnetic particles.
5) - white material on outside of ear husks found to have an unusual crystal growth habitat (this was independent of the white fungus "powdery mildew" also present).

Results and Discussion:

In Table I are the results of ear length measurements taken when the plants were received at the laboratory. The data represent all the ears from sample groups consisting of about three plants each.

Table I

Ear length analyses from plants taken in crop formation KS-03-164.

	Ear Length - cm			
Sample Group	ave.	s.d.	N-ears	Confidence Level
Controls	17.84	1.35	15	----------
Formation	15.55	1.53	19	P<0.05

Although the seed development appeared to be normal (full rows on the ears), the seeds from the formation appeared to be smaller in size. This is confirmed in the seed weight data presented in Table II.

Table II

Seed weights in each sample set presented as wt. per 20 seeds.

	Wt./20 seeds (gm)			
Sample Group	ave.	s.d.	N-sets	Confidence Level
Controls	5.86	0.50	5	----------
Formation	3.69	0.50	7	P<0.05

Paper roll germination was conducted in the usual manner and these data are presented in Table III. - seedling measurements taken.

Table III

Seedling growth at the 7-day development stage (KS-03-164).

	Seedling ht. (cm)			
Sample Group	ave.	s.d.	N- seedlings	Confidence Level
Controls	12.85	3.40	100	----------
Formation	9.32	3.94	131	P<0.05

The seedling growth difference in each of the sample sets is superimposed on the Schultz sampling diagram (Fig.2). The data are expressed as growth change relative to the mean control value from Table III (12.85 cm). Any change greater than 25% is considered significant at the P<0.05 level (a level of significance accepted in all scientific journals).

In the Fig.2 data we find that the growth suppression is quite pronounced along the NE sampling line, with the maximum suppression occurring just SW of the epicenter of the circle. At the SW edge of the downed crop the growth is at the level also found in the controls. This non-uniform distribution of vortex energies is commonly observed within many of the examined crop formations, one example being the "Julia Set" formation in England[1].

Another recent, anomalous finding in crop formation soil samples is the presence of magnetic particles, consisting of black beads with an iron magnetite appearance. This same type of magnetic bead material was found in five soil samples taken at this Pease formation. The concentrations were in the range of 2.5 to 3.5 mg per g-soil. This level is about 6-9 times higher than the level in normal soil (0.4 mg per g-soil). If samples had been taken considerably outside the formation this level of magnetic material would quite probably have been much higher, because the translational, centripetal motion within the energetic vortices containing the presumptive meteoritic material[2] literally throws the dense, magnetic particles outside the confines of the visually downed area. It should be pointed out that a 1994 formation (KS-02-104) at Blaine, Minnesota also contained magnetic particles which were identified[2] by Energy Dispersive Spectroscopy (EDS) as being pure iron oxide (Fe_3O_4), normally found only in meteoritic deposits[3].

On ears from sample sets C3 and S3 a white granular substance was found on the outside husks. Although the common white filamentous fungus "Powdery Mildew" was also found on the ears, the white granular material appeared to be independently distributed on the plants. Microscopic examination indicated the material to be of a micro-crystalline structure very similar to material found at the Blaine, Minnesota formation[2] in which unusual "corkscrew" type crystals were discovered. All of this anomalous, white, deposited material has been incorporated in an ongoing investigation in which the substances are being examined with x-ray crystallography and other techniques in an attempt to determine their basic structure.

Comments:

It is quite apparent that the vortex energies involved in this crop formation significantly inhibited the overall plant development. Based on the fact that, in addition to the ear and seed size reductions, we also observed seed or embryo growth inhibition, we suspect that this formation occurred around the midpoint of the development cycle. If the formation had occurred earlier in the crop growth stage, soon after anthesis, the seeds would not have been viable. On the other hand, if the formation had occurred at a time approaching plant maturity the vigor of the seeds, if influenced at all, would have been enhanced rather than suppressed. We have seen this growth enhancement, even in seeds showing a significant reduction in seed weight (as seen here).

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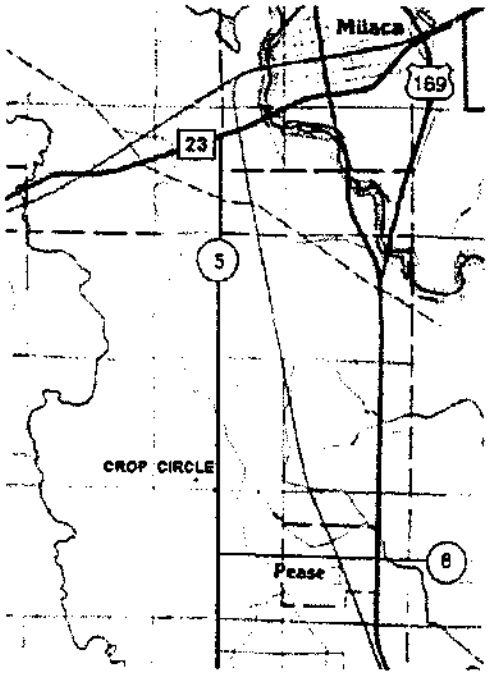
References:

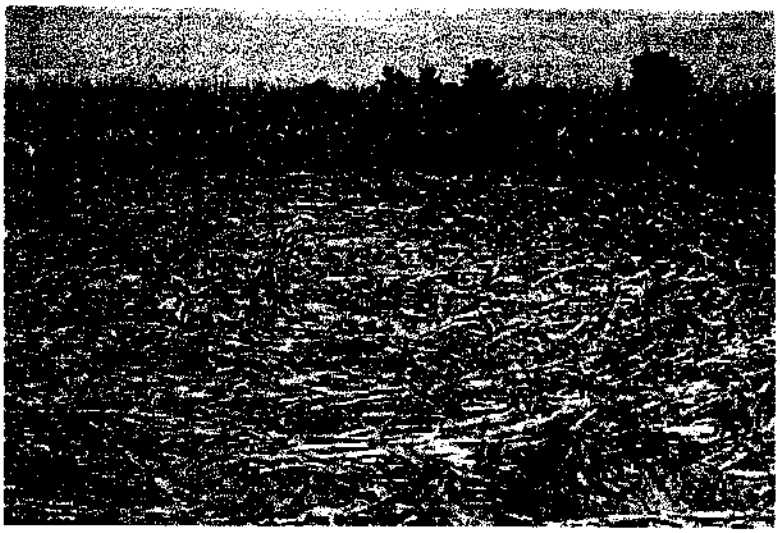
1) *"Crop Formation: "Julia Set", Stonehenge, UK"*, BLT Report No.78, Issued March 20, 1997.

2) *"Meteoritic Material in a Minnesota Crop Formation"* 1994-1995" BLT Report No. 52, Issued February 28, 1996.

3) Levengood, W.C. & Burke, J.A., *Semi-Molten Meteoric Iron Associated with a Crop Formation.* J. Scientific Exploration, 9, pp.191-199 (1995).

Fig 1. KS-03-164





Mille Lacs County Times photo by Jeff Hage

CROP CIRCLES OF 1996

Updated Thursday October 3, 1996

Pease, MN, USA. Discovered September 5, 1996

Henry Veurink, while driving by sitting high on his tractor seat, discovered a crop circle in a corn field one mile northwest of Pease, MN. It is a single circle 62 feet in diameter with stalks lying down in a counter-clockwise direction. Pease is located about 4 miles south of Milaca, MN. In October of 1994, a corn crop circle formation consisting of three circles in a row was discovered 10 miles east-northeast of here.

On October 2nd, Bob Schultz and Tex Ritter collected 40 corn stalks and 13 soil samples. These samples were submitted to the BLT Research Team for labratory analysis. John Burke, Dr. W.C. Levengood and Nancy Talbott are founders of the BLT team. Dr. Levengood will test the samples and write a lab report showing his findings. This report should be available by Spring 1997.

Fig 1

All samples taken at locations indicated +-1ft.

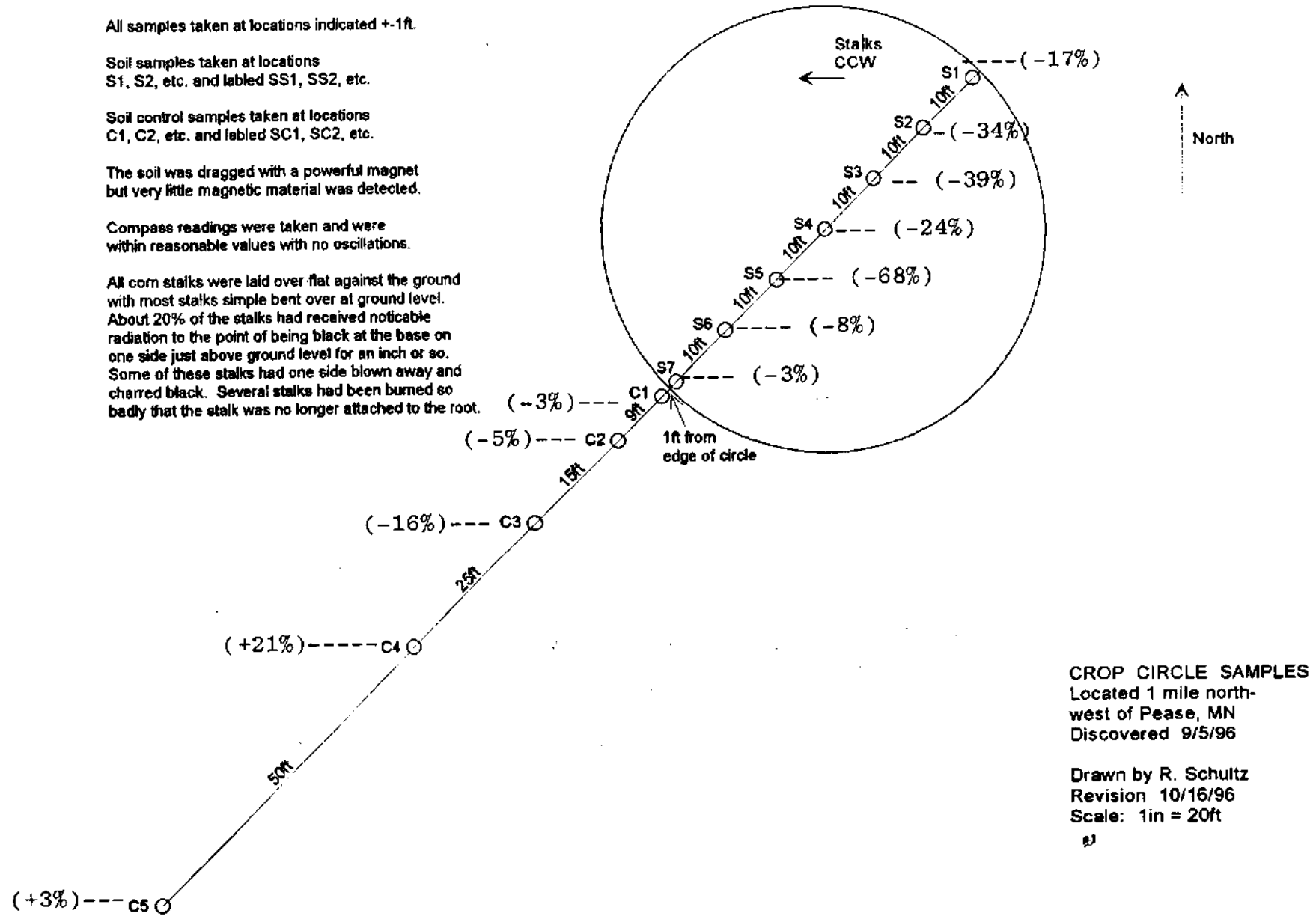
Soil samples taken at locations
S1, S2, etc. and labled SS1, SS2, etc.

Soil control samples taken at locations
C1, C2, etc. and labled SC1, SC2, etc.

The soil was dragged with a powerful magnet but very little magnetic material was detected.

Compass readings were taken and were within reasonable values with no oscillations.

All corn stalks were laid over flat against the ground with most stalks simple bent over at ground level. About 20% of the stalks had received noticable radiation to the point of being black at the base on one side just above ground level for an inch or so. Some of these stalks had one side blown away and charred black. Several stalks had been burned so badly that the stalk was no longer attached to the root.



CROP CIRCLE SAMPLES
Located 1 mile north-west of Pease, MN
Discovered 9/5/96

Drawn by R. Schultz
Revision 10/16/96
Scale: 1in = 20ft