Proximal Crop Formations: Nevada, Iowa, 1996

Laboratory Codes: KS-03- 179 & KS-04-22
Location: Near Nevada, Iowa (both formations on the same farm)
Material: Corn *(Zea mays)* & Soybeans *(Glycine max)*.
Discovered: Corn - October 25, 1996: Soybeans - October 8, 1996 - probably 24 hr.. old.
Sampled: By Beverly Trout, Altoona, Iowa (corn 10-26 & soy 10-11)
Formation Characteristics: Corn - slight tear drop shape 31' to 35' dia.; Soybeans - circle about 30' dia. with outer ring 3-4 ft. wide.

Relevant Findings:

1) Corn - significant, seedling growth enhancement in seeds taken at the extreme west edge of formation.

2) Soybeans - extensive redox[1] testing disclosed no apparent effect of the energies on the germination characteristics of seeds taken within the formation (compared with controls).

3) Soybeans - germination tests confirmed the redox studies - no indicated changes in the growth of seeds from the formation.

4) Soybeans - soil samples gave an asymmetrical pattern of significantly increased magnetic particle distributions around the site.

5) Soybeans - microscopic characteristics of the magnetic, soil particles appeared to be identical with material obtained from other recent crop formation sites[2,3] .

Results and Discussion:

Corn Formation (KS-03-179)

Ears of corn were sampled at the locations as indicated on Ms. Trout's diagram in Fig.1. Seeds from each sample ear were dried down to about 13% moisture and our routine germination test was conducted. In Fig.1 the 10-day seedling growth differences are superimposed as percent change (typed figures) compared with the mean value from four control sets consisting of 75 plants total. Any change greater than 20% is significant at the $P<0.05$ level.

Here we note that the only samples showing significant growth increases are located at the extreme, western edge of the formation; that is, samples S-2, S-6 and C-4. It should be noted that C-4 was taken just outside the circle and appears to have been subjected to the vortex energies in a "spillover" effect, often observed. This was further indicated by the results from sample C-5 taken a short distance away. In C-5 two separate tests were conducted and both show excellent

agreement with other controls taken at greater distances. In other words the spillover effect extended only a short distance outside the formation. The seeds from the three samples showing the accelerated growth appear to have been subjected to an active, electrophoretic component[4] of the total energy complex which produced the crop formation.

Soybean Formation (KS-04-22)

The soybean plants were sampled at the point of complete maturity (Oct. 11, 1996), which means that we have the mature seeds available for examination. A routine germination test was conducted with five sample sets from the formation and five control sets. A comparison of the seedling growth in the samples from the formation with the growth in the control sets, disclosed no significant difference between them. As a further check, detailed redox studies were conducted. Three separate test runs were conducted using six controls and six samples from the formation. The mean redox ratios[1] from the entire sampling groups are summarized in the following table.

	Redox Ratio		
Sample	ave.	s.d.	Total Test Runs
Controls (6-sets)	0.145	0.051	86
Formation (6-sets)	0.142	0.045	86

These data confirm the findings from the germination tests - namely, there are no significant changes in the biochemistry or germination characteristics of the seeds. It should be pointed out however, that the seeds were fully mature and it is not surprising that there were no detectable influences from the plasma vortex energies.

As we have observed in many recently sampled crop formations[2,3] (although not all), there are deposits of minute, spherical, magnetic particles associated with the regions of crop circles. In Fig.2 are the summarized results from magnetic-drag tests conducted on soil from the soybean formation (indicated by the shaded circle and ring). Most of the samples were taken on a North-South line through the circle and ring formation - with controls taken outside as indicated (distances not to scale). The tapered, solid black wedges in Fig. 2 represent the approximate location and the magnitude of the magnetic-drag material found in and around this formation. One cm wedge length represents a concentration of magnetic material of 1.0 mg/g-soil. In normal soil the concentration is about 0.4 mg/g-soil. In general any sample with a wedge greater than 1 cm length is considered to have a significant magnetic particle density.

The first thing to hit the eye in Fig.2 is the fact that the concentration of magnetic material is higher outside the formation than within the confines of the downed crop. This is entirely consistent with what we have found in other formations, the explanation being that the high rotational velocity of the plasma vortices within the formation region throws the clouds of dense, magnetic spheres toward the periphery (by centripetal force) and they become distributed at the edge or just beyond the confines of the observed downed plants. In this case there appears to be an anisotropic (non-uniform) distribution with heavy concentrations at the southern perimeter and

beyond. When considering the findings from our other studies of interacting vortices[5] this unequal distribution of magnetic particles would be in accord with the complex mechanics involved within interacting chaotic systems. A microscopic examination revealed the presence of the ubiquitous black beads of presumptive magnetite (Fe_3O_4) particles.

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References

1) Levengood, W.C., *Redox-responsive electrodes applied during plant morphogenesis.* Bioelectrochem. & Bioenergetics, **19**, pp. 461-476 (1988).

2) *Crop Formation: Paulding, Ohio USA.* BLT Report No. 80, Issued March 31, 1997.

3) *Crop Formation: Madera, California, USA.* BLT Report No. 83, Issued June 15,1997.

4) Levengood, W.C., Electrophoresis in plant cell organelles. Bioelectrochem. & Bioenergetics, **25**, pp.225-239 (1991).

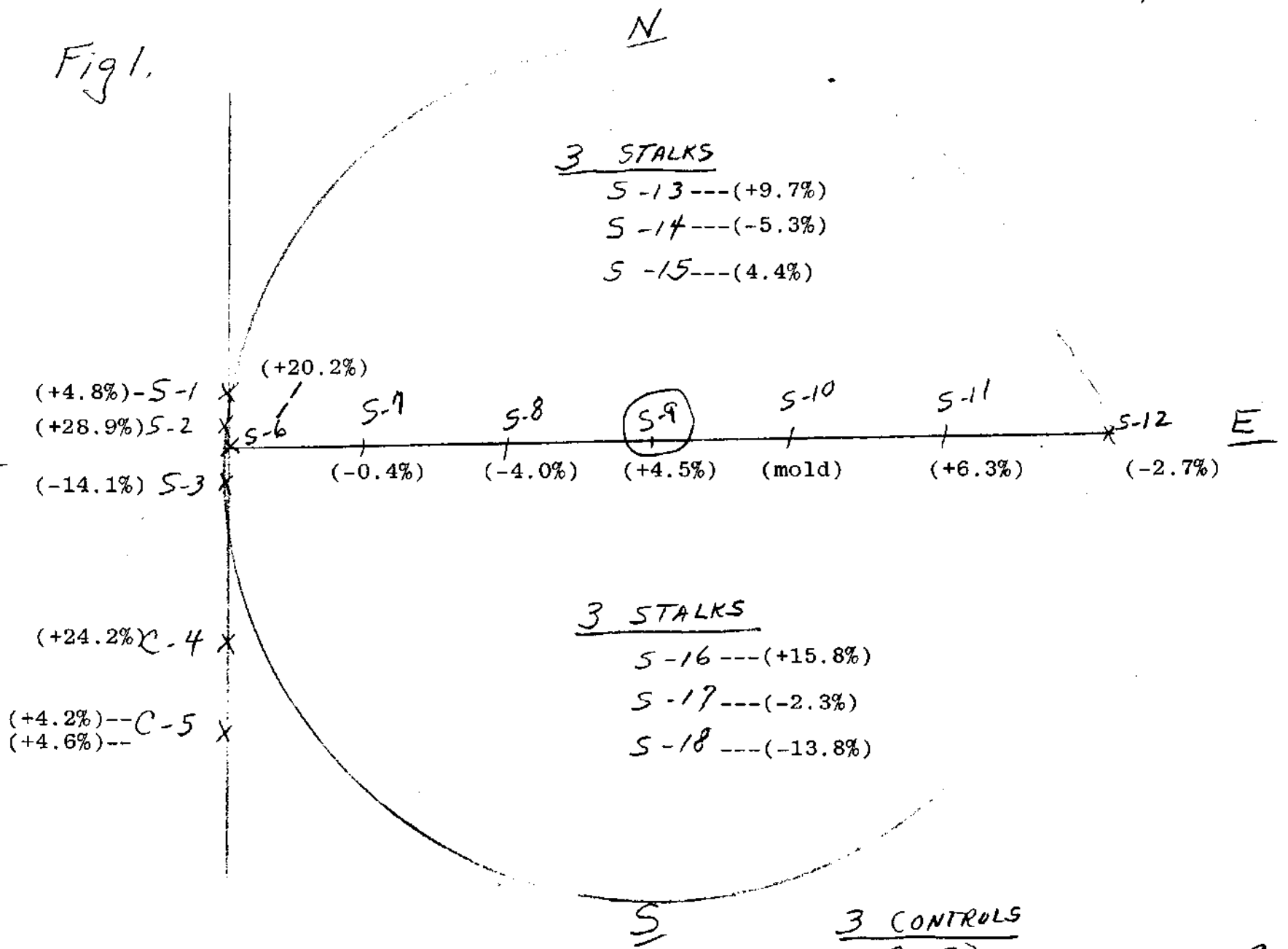
5) Levengood, W.C. & Burke, J.A., *Semi-Molten Meteoric Iron Associated with a Crop Formation.* Journal of Scientific Exploration, **92**, pp. 356-363 (1994).

CORNFIELD CIRCLE

DISCOVERED 10-25-9?

KS-03-179

Fig 1.



Mean of four control sets including two C-5 tests
N=75 plants

3 CONTROLS

C-19, C-20 } CLOSE IN

C-21 } FAR OUTSIDE

C-23, C-24 } AWAY

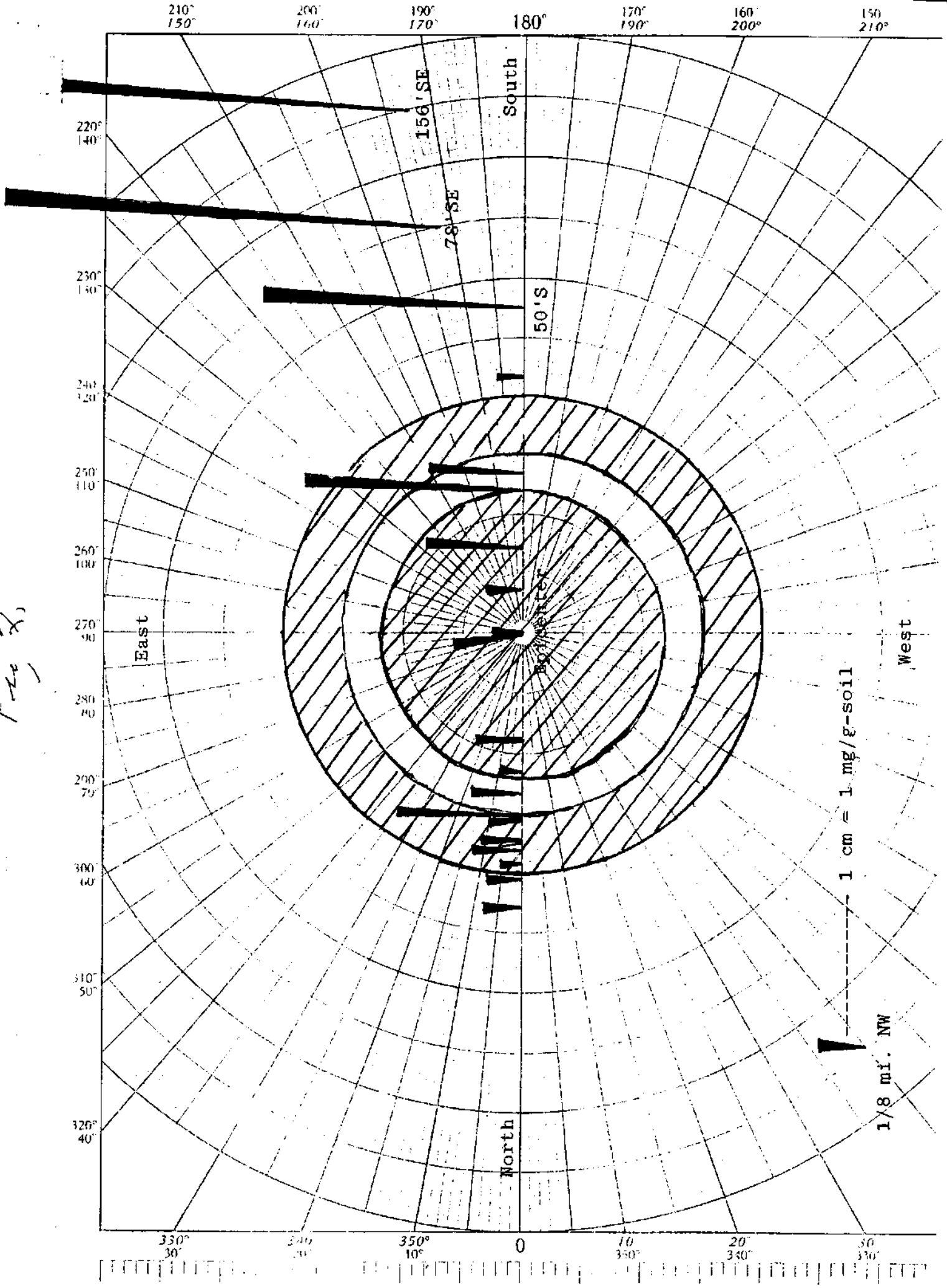

210° 150°
200° 160°
190° 170°
180°
170° 190°
160° 200°
150° 210°
South
156'SE
78'SE
50'S
220° 140°
230° 130°
240° 120°
250° 110°
260° 100°
270° 90°
280° 80°
290° 70°
300° 60°
310° 50°
320° 40°
330° 30°
340° 20°
350° 10°
0
10° 350°
20° 340°
30° 330°
East
West
North
Boulder
1 cm = 1 mg/g-soil
1/8 mi. NW

Fig 2