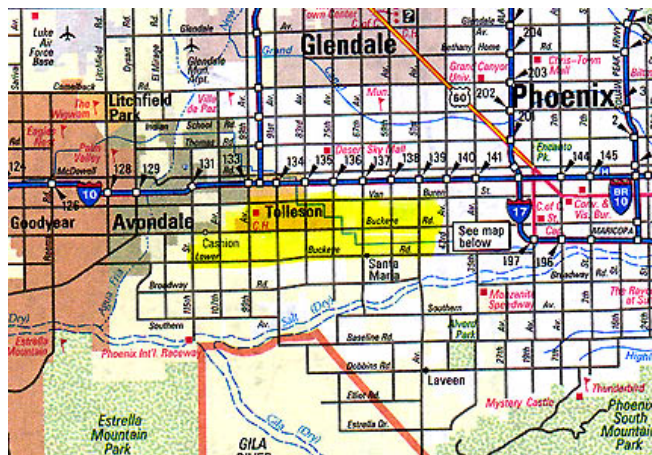




## Part 2: Anomalies Confirmed in Pennsylvania and Arizona Randomly Downed Crops

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Tolleson, a Phoenix suburb, is region where Brooks Farms cereal crops are grown in big fields on Buckeye Road and Lower Buckeye Road.



**Above and below:** In late May 2005, three barley fields - including this one operated by Brooks Farms near intersection of 75th Avenue and Buckeye Road, Phoenix, Arizona, in the Tolleson suburb - had straight parallel lines of standing crop between which were randomly downed and standing crop. These May 25, 2005, aerial photographs © 2005 by KTVK, Channel 3 News.





Road side view looking down some of the straight berms and randomly downed and standing barley. May 24, 2005, photograph © 2005 by Scott Davis.



Foreground is single standing clump of wheat inside long, straight section of downed barley. May 24, 2005, photograph © 2005 by Scott Davis.

Return to **Part 1**

**August 1, 2005 Grass Lake, Michigan** - In the third week of May 2005, three long, parallel strips of wheat were reported by a Phoenix radio station to be laid down in a field near Lower Buckeye Road and 75th Avenue in the Tolleson suburb of Phoenix, Arizona. Jeffrey Wilson, Director of the Independent Crop Circle Researchers' Association (ICCRA) in Ohio, asked Rod Bearcloud Berry to investigate which he did on May 19. Jeff e-mailed, "Bearcloud reports that there are three linear flattened pathways approximately 525 to 600 feet in length that are parallel to the power lines and the road. Interspersed between the three pathways are a series of irregular flattened shapes, none of which cross any tramlines." [ See **052605 Earthfiles**. ]

Other investigators confirmed there were three wheat fields in Tolleson similarly affected with straight, randomly downed crop. Phoenix resident, Kathy Doore, volunteered to sample the three fields for analysis by ICCRA and biophysicist W. C. Levengood of the Pinelandia Biophysical Laboratory in Grass Lake, Michigan. ICCRA and Levengood confirmed that the wheat growth nodes of the downed and standing plants inside the odd patterns were definitely elongated when compared to control plants collected from outside the randomly downed sections. W. C. Levengood also found other anomalies such as a node expulsion cavity, a deformed peduncle and magnetite particles sampled from the randomly downed soil. I talked with him last week about his formal report, which is included under More Information after interview.

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### Interview:

**W. C. Levengood, Biophysicist, Pinelandia Biophysical Laboratory, Grass Lake, Michigan:** "In plants well sampled from the three Phoenix (Tolleson) fields by Phoenix resident, Kathy Doore, I started off in the usual manner by looking at the node lengths on the plants. After I collected the nodes for the lab exam, I realized that Kathy, who collected field samples and controls, did so in a manner that gave us more information than usual from the randomly downed and upright wheat plants. What she did was gather all standing and downed crop samples together within five to ten feet of each other. That allowed us to break this study of the node lengths into three categories.

## Tolleson, Arizona, Wheat Growth Node Elongation Studies from Three Wheat Fields Along Buckeye Road

Figure 1. Node Elongations in Flattened and Standing Wheat

1) Flattened wheat plants in the randomly downed formations = 54% growth node elongation of "bent elbows."



Flattened plants with 54% growth node elongation, sampled from inside randomly downed wheat in Tolleson, Arizona. Photograph © 2005 by W. C. Levengood.

2) Upright wheat standing inside randomly downed formations = 37% growth node elongation.



Standing plants with 37% growth node elongation sampled from inside randomly downed wheat in Tolleson, Arizona. Photograph © 2005 by W. C. Levengood.

3) Control wheat taken outside the randomly downed formations for base line comparison has straight and shorter growth nodes.



Straight and shorter growth nodes in control plants sampled from outside randomly downed wheat in Tolleson, Arizona. Photograph © 2005 by W. C. Levengood.

The node lengths had such striking differences. I measured a lot of plant nodes. In the three groups, each group had between 50 and 85 plants that I examined. That's very solid data. Then you do a statistical analysis on that to get the mean value and standard deviation.

What I found was that the downed plants had a high statistically significant increase in node expansion, compared to the controls of 54% increase. In the upright plants in the formation, a 37% increase. Both are statistically significant compared to the control plants.



After seeing that, I saw that the energy that caused this was late in the development cycle. And I wondered if it had any effect on the seeds which were probably close to development? If so, could I detect it?

## Seed Growth Test

That's why I did the study of the seed growth, the vigor factor that determines development. The higher the factor, the more vigor in the seeds. But what I found was almost an inverse correlation.

- 1) The downed plants in the formation had the *lowest* development factor of 1.47.

Figure 3. Bioassay to Test Seed Vigor



Downed plants sampled in Tolleson, Arizona, wheat had *lowest* development factor of 1.47.  
All seed test photographs © 2005 by W. C. Levengood.

- 2) The standing plants had 1.94, which was higher.



Standing plants sampled in Tolleson, Arizona wheat had higher development factor of 1.94.

- 3) The controls had 3.16.



The vigor was highest, 3.16, in these control seeds collected from outside the randomly downed wheat formation in Tolleson, Arizona.

MEANING THAT THE SEEDS IN THE DOWNED WHEAT HAD BEEN THE MOST AFFECTED BY ENERGIES WHICH *INTERFERED* WITH PLANT GROWTH FROM THOSE SEEDS?

Yes, the formation seeds were affected. Visually, the seeds looked perfectly normal. But

when you do this bioassay, I found their growth vigor was suppressed.

WHY IS IT IN OTHER CROP FORMATIONS, THERE HAS BEEN ACCELERATED GROWTH FROM SEEDS SAMPLED FROM INSIDE PATTERNS?

OK, the reason for that is it depends on the stage of plant development in which the energies interact - plus the complexity of the energies. Don't forget that microwave energy is not the only thing that hits the plants. There are ion electron avalanches which can enhance the growth. So, it's the ratio of the two microwaves and ion electron avalanches. You never know what that ratio is until you do a bioassay and look at the development factor.

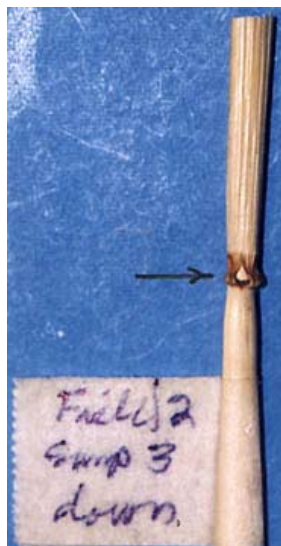
SO, YOU CAN EITHER END UP WITH STUNTED SEEDS OR INVIGORATED SEEDS.

Exactly. It all depends on the ratio and how the energies are made up. These are what we call 'initial' or 'end point' energies. The two primary ones that do the damage that we can actually measure easily in the lab are the microwaves and the ion electron avalanches. The microwaves generally predominate in terms of damage to seed development. In terms of accelerated growth and higher vigor, that is the ion electron avalanches which cause more subtle effects.

## Expulsion Cavities in Sampled Tolleson Wheat

There is another factor that I would like to mention. I found that in addition to the elongated nodes, there were expulsion cavities in the sampled Tolleson wheat plants.

Figure 2. Expulsion Cavity



Expulsion cavity formed at apical node in a fully mature wheat plant.  
Photograph © 2005 by W. C. Levengood.

[ Editor's Note: Expulsion cavities are holes in the cellulose fibers in the outer epidermis of the growth nodes. The tough fibers are literally pushed apart from within. That happens when there is a high pressure build up in the growth node moisture exposed to microwave energy emitted by the spinning plasma vortices hypothesized to be the creating force of crop formations. ]

IS THERE ANY ENERGY BESIDES MICROWAVE THAT COULD CAUSE THE EXPULSION CAVITIES?

No, I don't think so. The first scientific paper I wrote about this was published in the international journal for plant biology, *Physiologia Plantarum*.

## A Deformed Peduncle Implies Wheat Interacted with Energies *Before* Randomly Downed Event

Figure 2. Deformed Peduncle



Fig. 2, Deformed peduncle.  
Photograph © 2005 by W. C. Levengood.

But, in addition to elongated nodes and expulsion cavities, there was a *deformed* peduncle. The interesting thing here is that the expulsion cavities occurred along with a deformed peduncle, which is rare. The peduncle is the main stalk or stem bearing the solitary seed head on plants such as wheat, corn, rye, barley and other grasses. Most people would call it a plant stem, like a stem on a flower. In the Phoenix fields, one of the plants sampled had a deformed peduncle like those we have seen before from England and Montana.

The problem here is that this was found in the *same* plant sample as the expulsion cavity. The incongruity comes with the fact that the expulsion cavity only forms when those cellulose fibers on the outside of the plant become very tough in the late stages of the plant development.

Yet, the peduncle must become deformed much earlier on when that particular plant tissue is in its early stage of development, when the cell division is very high, and it gets hit with the spinning plasma energies. When the cell division is high, the cells are very subject to outside energy influence. But, the rest of the plant develops normally. The interesting thing is here is the seed head which you would expect to be even more deformed because it's the germinal tissue. But the seed head developed normally above the deformed peduncle because it is not ready yet to go through the stage of maximum cell development, or mitosis.

So, what that means is the energy is extremely selective and hits fields at certain times, sometimes more than once, and whatever happens to be at a high development stage gets severely altered in its developmental pattern. This particular Tolleson crop was hit *at least twice* with the microwave energies during the growing season of that barley.

BECAUSE THE DISTORTED PEDUNCLE WOULD HAVE HAD TO HAVE INTERACTED WITH THE ENERGIES *EARLIER BEFORE* THE WHEAT WENT DOWN WHILE THE PLANT WAS STILL GROWING TO MATURITY?

Yes. This is a very interesting phenomenon.

## Magnetite In Tolleson Sampled Soil

I also found a collection of magnetic particles in the Tolleson field soil. You never know if you're going to get magnetic particles or not. I think the reason for that is the magnetic particles are not really a part of the organized energy that produces crop formations. They are picked up along the way by the crop formation energies when they interact with clouds of the meteoritic particles. The particles are very erratic. They follow meteorite showers. But they happen all the time.

So, the crop formation energy can meet up with a cloud of meteoritic material. Researcher Gene Thomas has also learned that foundries can produce these magnetic particles and spew the micron-sized iron particles into the air.

Gene has done some marvelous work in chasing this down and I have given him some of

my samples to do a magnetic drag on. Now, instead of taking soil and doing the magnetic test drag that is dirty and time-consuming, Gene would like to make a device that can go right into the field and pick up on very localized magnetic fields from the iron particles. That's a good idea and he could map out the whole area that way. He's still working on designing the instrument.

## Could Irrigation Water and Wind Have Caused the Elongated Growth Nodes and Stunted Seed Vigor?

Absolutely not. With irrigation, the plants do go down easier in the wind. But the reason for that is not that the plants are weaker. It's because the irrigation causes the root systems to spread out along the surface of the soil. So, if the plants can get energy from the soil surface, it's a conservation of energy in Nature. The plants don't bother sending a tap root straight down into the soil because they don't need to.

They are uprooted more easily than a plant growing in a normal season that has rains and then drought and then they have to send down a tap root to go down and get the moisture from lower depths.

BUT THE IRRIGATION AND WINDS COLD NOT CAUSE NODE EXPULSIONS OR THE EXPANSIONS IN THE LENGTHS OF THE GROWTH NODES?

No.

SO THE MEDIA SHOWED THE PUBLIC THE THREE PHOENIX FIELDS THAT LOOKED AS IF THE PLANTS HAD BEEN LAID DOWN IN LINES AND THE FARMER SAID IT WAS IRRIGATION AND WIND. YOUR INVESTIGATION IS SAYING THAT THERE MIGHT HAVE BEEN IRRIGATION AND WIND, BUT SOME KIND OF COMPLEX ENERGY SYSTEM ALSO INTERACTED WITH THOSE FIELDS?

Yes. If you looked at the lines of soil with an electrovolt meter, you'd probably find that the electric field around those berms were slightly different than in the flat soil. The reason is that whenever you have a peak, or raised height, you concentrate the electric field energy which is whenever you have a point or hill. That could direct the energy toward these irrigation energies. So if there is a direction between the berms, it doesn't have to do with the irrigation water. It has to do with the electric field configuration along the field.

## Why Geometric Crop Formations in England and Randomly Downed in United States?

IF THIS SAME PLASMA VORTEX WITH COMPLEX ENERGIES IS INVOLVED WITH CROP FORMATIONS AROUND THE WORLD, WHY IS IT THAT IN THE THREE ARIZONA FIELDS WE DID NOT FIND BEAUTIFUL GEOMETRIES?

I think the reason why England has the very intricate geometric formations and the crop formations here in the United States are more scruffy and appear to be more random is because crop formations is that crop formations are often associated with stormy weather. The U. S. has a high degree of turbulence in its weather, from tornadoes to hurricanes. Let's say that the ion plasmas are coming down from the ionosphere toward the Earth and they are being pinched by the magnetic pinch effect of the Earth's magnetic field. When they reach the crop field, if nothing disturbs them, they can make a very intricate geometric pattern.

But, if there are a lot of cross wind and all kinds of turbulence in the atmosphere, that can break the pattern up into all kinds of random shapes.

## Could Vortex Energies Be Manipulated by Advanced Intelligences?

WHAT ABOUT THE SOURCE OF THE SPINNING PLASMA VORTICES? DO YOU THINK THERE'S ANY EVIDENCE OF AN ADVANCED INTELLIGENCE, PERHAPS EVEN USING NATURAL EARTH METEOROLOGICAL CONDITIONS TO MAKE SPECIFIC CROP DESIGNS?



A few years ago five or six years ago I would have said no. But, there have been things that have come up more recently that I have not published and I think there might be some direction to this. I can't say for sure, but let's say I'm weakening on my viewpoint there.

THEN IT MIGHT BE POSSIBLE THAT A NATURAL MECHANISM INVOLVING THE EARTH'S ION PLASMAS COULD BE MANIPULATED?

Yes, it might be used by some other intelligence."

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## More Information:

### Biophysicist W. C. Levensgood's Formal Report

Figures 1, 2 and 3 referenced in these four pages are labeled and shown above in Earthfiles report.

***Research Report from Pinelandia Biophysical Laboratory***  
Grass Lake, Michigan 49240

July 12, 2005

Crop Formation: Phoenix, Arizona 2005  
Laboratory No. KS-06-107

**Location:** Three Fields on Buckeye Rd., Phoenix, Arizona

**Material:** Barley, (*Hordcum vulgare*), upper node plus seed heads, with soil samples taken at sampling sites.

**Discovered:** Early May, 2005 and sampled May 27, 2005

**Sampled by:** Ms. Kathy Doore, Surprise, AZ.

**Formation Characteristics:** Large downed areas forming long narrow strips with irregular edges, and containing random patches of upright plants. All downed lanes were located with their long axis in a N-S direction.

#### **Laboratory Findings:**

As data were analyzed it became apparent that Ms. Doore incorporated an important factor in the sampling protocol, which heretofore has been only minimally considered. As she collected samples of downed plants, she looked for the nearest clump of standing plants and sampled them in a similar manner. In the laboratory analyses three groups of plant samples were analyzed; namely the "downed plants" taken in the formation, "standing plants" taken in the formation and "controls" taken well outside the formation areas.

Apical node lengths were determined (using the normal procedure) in all of the plants submitted (Total – 218). When these node length data were examined in relationship to the three specific sampling sites, it was evident that the level of applied energy was very similar over the entire sampling region. For this reason, the data were combined, and the results of the statistical analyses are listed in Table I.

**Table I.**  
Node length ( $N_L$ ) measurements in Crop Formation KS-06-107

Sampling Site	ave. $N_L$ (mm)	sd	N-plants	V-variance
Downed Plants-in formation	4.88*	0.58	50	11.9%
Standing Plants- in formation	3.24*	0.46	83	14.2%
Controls- outside formation	2.62	0.26	85	9.9%

\*-- $P < 0.05$

It is interesting to note in Table I, that both the downed and standing plants have statistically significant node-length increases compared with the controls. The level in the standing plants lies provocatively between the downed and controls. This suggests that



the applied energies were quite different in intensity at the standing plants, compared with plants at the downed areas

In addition to the significant node length increases, there were other interesting changes in the apical nodes. In Fig.1 are nodes representative of the major sampling regions. In the upper set of nodes from normal or control plants, there are two factors which are characteristically observed in normal, mature plants of barley (and other species in this family); namely, the shrinkage or drawing inward of the node into an "hour glass" shape, and the brown coloration.

The center photo in Fig.1, of nodes from standing plants within the formation, both the lateral shrinkage and coloration are reduced in frequency, in fact, we observe here the beginning stage of node swelling. In the bottom photo showing nodes from downed plants within the formation, this node swelling becomes quite obvious. Here, the microwave energies in the plasma vortex strike the plant and cause the nodes, with their higher moisture content, to swell, soften and bend over. At the same time, this heating also breaks down the normal pigments in the node tissue, therefore the brown coloration was not formed at maturity.

The two photos shown in Fig.2, point out the very interesting possibility that the field was subjected to the vortex energies at two different stages in the plant development cycle. Both abnormal growth effects were discovered in samples from Field-2, sample set #3 plants. The left photo shows an apical node with what has been defined in this laboratory as an "expulsion cavity". Previous studies of crop formation samples containing these cavities, have provided clear evidence that this anomaly forms near complete maturity of the plant. When a plasma vortex system interacts with the plants, the microwave energies heat the interior of the stem nodes (the nodes have a higher dielectric constant than the internodes), thus producing sufficient pressure to cause the node to expand (see Fig.1 bottom photo), providing the tissue is still green and visco-elastic. If the plants are mature the outer cellulose fibers are beginning to dry out and, as is the case here, the node literally blows apart.

By contrast, the interesting morphological changes shown in the right photo in Fig.2, occurred at the initial stages of seedling development. The upper arrow points to the apical node, out of which grew the twisted, severely deformed peduncle (stem between apical node and the seed head). Normally, the peduncle extends vertically above the node, with lengths in the range 10-20 cm. The stem region between the apical and penultimate nodes (between the arrows) is also of much shorter length than observed on control plants. The attached seed head is of normal appearance and contained well developed seeds.

This type of stem deformity, although rare, has been detected in several other crop formations in wheat. What is demonstrated in Fig.2-right, is that the energies in crop formations can selectively injure specific tissue regions on the plant. So far, these studies indicate that tissue regions undergoing rapid or active cell division (mitosis) are altered, whereas, nearby tissue may be unaffected. The important point here is that the plasma

energies appear to have interacted with the field at two different times during the development cycle of these plants.

A question that one might now ask – are there other alterations in the plants, which were induced by these external energies? The answer to this was provided by data obtained in a standard, paper roll germination test, using seeds from the three sampling sites. In this protocol the seedling growth data at the 5-day stage of growth, allows one to apply a development factor ( $D_t$ ), given by,

$$D_t = f_g \times S_h \quad (1)$$

Where  $f_g$  is the fraction germinated in the roll and  $S_h$  is the average seedling height. Three sample sets (of 30 seeds each) were examined from each of the Phoenix sites and the data are summarized in Table II.

Table II.  
Seedling development factor calculated from germinations tests ( $D_t$  determined at 5-day development in a controlled germination chamber).

Sampling Site	ave.	sd	N-seeds
Downed Plants- in formation	1.47*	0.40	90
Standing Plants- in formation	1.94*	0.48	90
Controls- outside formation	3.16	0.39	90

\*-P<0.05

From these data it is quite apparent that the applied energies have significantly reduced the development vigor in the seeds from the formation. If we compare the data in Tables I & II, we find that there is an apparent inverse correlation between the mean values of node lengths and seedling development. In other words, as the mean node lengths significantly increased, the seed vigor ( $D_t$ ) consistently decreased. This is exactly what would be expected if the formation energies are influencing the seedling growth related tissues in the plants.

These growth differences are also illustrated in the test rolls (Fig.3) from the bioassay germination series. The upper photo shows seedling development in one of the 30-seed, paper test rolls containing seeds from the normal or controls plants outside the formation. The seeds from the standing plants inside the formation (center photo Fig.3) produced only slightly fewer seedlings ( $f_g$  in equation-1), but the lengths of the seedlings ( $S_h$  in equation-1) were greatly reduced. Seeds from the downed plants (lower photo in Fig.3) inside the formation produced both fewer and reduced seedling height.

With plant alterations at these levels of significance it was not surprising to find, as shown in Table III, high levels of magnetic-drag material. The mean levels are given for each of the major sampling sites. The normal or control level outside most crop formation areas is around 0.4 mg/g-soil, or less.


Table III.  
Magnetic-drag material collected within three fields, at the Phoenix, AZ, crop formations  
(KS-06-107)

Sampling Site	Mg/g-soil		N-locations
	ave.	sd	
Downed Plants- in formation	26.4	10.7	8
Standing Plants- in formation	40.0	11.4*	8
Controls- outside formation	23.6	14.9	7

P<0.05

It might seem counterintuitive that the highest deposits of H-drag material was found in the standing plants, rather than in the downed plants, which as shown in Table I and in Table II, experienced the highest intensity of energy input. A strong clue as to what happened here, was presented in a side note on Ms. Doore's sampling diagram; "*all standing and downed crop samples were taken together within 5 to 10 ft. of each other*". In the downed regions the radial velocities of the plasma vortex systems, are at a maximum. From the mathematics of forces inside a rapidly rotating vortex system, it has been shown that the centripetal or outward directed force on particle in the vortex, increases with distance from the center of the vortex. Since there is no "barrier" around these energy vortices, a fraction of the particles are spewed outward and end up at the base of the nearby standing plants, and beyond.

The high distribution of particles in the control samples in Table III, also supports this concept of particle densities being controlled by centripetal forces inside a vortex system. These outward directed distribution patterns are not unique with the Phoenix formation, but are in complete accord with many other crop formations studied at the Pinelandia Laboratory.

  
Dr. W.C. Levengood  
Pinelandia Biophysical Laboratory

Also, see other Levengood and Earthfiles reports about crop formations in [Earthfiles Archives](#).

#### Websites:

Kathy Doore: <http://www.labyrinthina.com/phoenixcropformation.htm>

<http://www.cropcircleconnector.com>

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