2011 Nettle Journal September

Sept. 11, 2011: Email recv'd: Hallo Myra. It is nice to follow your project, with the nettle. The nettle extract did not work as herbicide, but is very good as pesticide.

Venlig hilsen/Best regards age BachNy Vraa Bioenergy I/Gl. Vraavej 3DK-9382 TylstrupTlf.: +45 9696 6200Fax: +45 9696 6201Mobil: +45 4018 9900

Privat: +45 9826 1722e-mail: aab@nyvraa.dk

and my reply:

Tell me more about your herbicide and pesticide findings on stinging nettle tea. Very interested. My herbicide experiment failed completely – the weeds may even have benefited from the nettle! I am very interested in your findings too.

Results of herbicide research at La Paix: No effect of stinging nettle tea on weeds. May even have grown larger! Photo to follow. Scroll down.

Research data collection discontinued as of Sept. 1, 2011. Information on commercial growing and marketing of stinging nettle read:

http://www.caes.uga.edu/publications/pubDetail.cfm?pk_ID=7470 Handbook from U. of Ga. – as tomato production has slowed considerably in the Research plot at La Paix, and information gleaned from Univ. of Ga. extension handbook link above indicates that viable production statistics are in a three week period following peak production (commercial) indicates that these results are the most indicative of efficacy. TC to Statistics professor at WVWC asking for help in correlations no response. Will email Barbara Liedle for help with stats today. Some help may be obtained from my former apprentice, Judith Vojik, who assisted me in picking tomatoes on Labor Day weekend.

I emailed Jim Kotcon and Barbara Liedle today for help with getting definitive statistical analysis of results of project tomatoes."lapaix" <lapaix@hughes.net> 9/11/2011 12:28 PM >>>
Dear Barbara and Jim: I need help in doing the more advanced statistics on the results of my research on stinging nettle fertilizer efficacy on Tappy's Heritage tomatoes. Specifically, do the data below reveal enough differences to be statistically indicative? Could someone or you help me with the statistical analysis. I am giving a power point presentation at the WV Herb Conference in Jackson's Mill on Oct. 1st. I would very much appreciate some valid confirmation of my results. I think the stinging nettle as fertilizer (or soil enhancer or motivator) is efficacious. Does my data prove it?

Thanks for all your help heretofore – almost finished. It's been a much longer, much more tedious, much more energy depleting, money depleting project that I ever envisioned. It's a good thing I am a workaholic – – but I intend to retire from that appellation,

Sept. 12: TC Stukenholtz Lab Jessica Taylor: I will be mailing 36 leaves from each of the five stinging nettle research rows in individual titled paper bags overnight for a total cost of $255. for tissue analysis – to determine if there is any nutritional difference in leaves from the five research rows. I could not find any source in WV to get the tissue analysis done and think it is so important to the overall results that I am paying for it out of my own pocket (again)…..

Have finished first 7 web pages of my Power Point Presentation on the Research project – to be presented Sat. Oct. 1st at WV Herb Conference in Jackson's Mill, Lewis County WV.

The Rural Blog reports on stink bugs:

http://irjci.blogspot.com/2011/09/stink-spreads-as-bugs-march-south.html

Sept. 13, 2011: Google research on Organic control of stinkbugs:

Companion Planting

One of the best ways to prevent stink bugs from getting into your garden and eating just about everything is to do some companion planting. It's not as difficult or involved as it sounds, it simply means to plant flowers, plants or herbs that are natural deterrents to stink bugs and other pests. Here's a list of common, easy to find plants, herbs and flowers that, when planted in and around your garden will act as a natural and organic stink bug repellent:

Marigold – Try planting a border of marigold's around your garden.
Radish – Many garden pests, including stink bugs don't like the smell of radishes.
Catnip – This will work best if you don't have an outdoor cat.
Mint – Easy to grow, hardy and needs minimal attention to thrive.
Garlic – Many garden pests also hate the smell of garlic.
Tansy – Pretty yellow flower from the Aster family.

Trap Planting

The concept of trap planting is simple: plant flowers, vegetables, plants and herbs that the stink bug loves somewhere away from your garden. This way, you're preventing them from destroying your fruits and vegetables by giving them other fruits and vegetables on which to feast. Here are some great trap planting flowers and plants to lure stink bugs away from your garden:

Sunflower
Buckwheat
Triticale
Sorghum
Millet

If you can't find some of the plants listed above, scientist say that stink bugs are attracted to the color yellow, so try your hand at planting as many different types of yellow flowers

http://organic.lovetoknow.com/Organic_Pest_Control_for_Stink_Bugs

9-14-2011: Tissue Analysis of Tomato leaves: Picked 4 leaves from each of 9 plants in the 5 research rows today about 11:30 a.m. after heavy dew from last night evaporated. 36 leaves were placed in each of 5 brown paper bags (labeled a/c to row #) and will be mailed via overnight to Stukenholtz Lab. email confirmation:

"It would be $51.00/ row for a total of $255.00. Also we would need 20-30
leaves from each row and each row would need to be in its own bag. The test
would include Total Nitrogen, Nitrate Nitrogen, Phosphorus, Potassium, Zinc,
Iron, Manganese, Copper, Boron, Calcium, and Magnesium.

Jessica Taylor
Stukenholtz Laboratory
208-734-3050

This is the same lab which did an analysis of the hydrosol. (see July) Photos to follow.

Tomato plants still looking pretty good – Tuesday, Sept. 13th, 2011. Looking south west from first row, Stinging Nettle Tea.	This is the disastrous experiment seeing if stinging nettle hydrosol would act as an herbicide. Hand weeded plot in foreground – weeds about 2 inches high- Nettle herbicide application in background- weeds about 5-6 ft. high!	Brown paper bags delineated with Row # and application type – each filled with 36 leaves (4 leaves per plant) from each row. Sent overnight to Idaho (see above email) on Sept. 13th, 2011. Cost: 2.5 hours labor $255. for tissue analysis.
9-13: email to Zach Fowler, former p.t. apprentice and friend of Judith. He is now a professor at WVU – asked help with stats.		

Sept. 15th: My helper, tells me that the Post Office would not mail my samples (see right photo above) Overnight as they were not capable of it, so he sent the tissue samples Priority which would take 2 days or more. I telephoned Jessica Walters at the Lab and she said if they got it in two days it would probably not be ruined. However, to date, I have not had any contact from her stating she had recv'd the package. I am concerned that the $255. I paid for the analysis will be wasted on dried up samples. Will call Idaho first thing (10 a.m. or so) they are open tomorrow.

Sept. 17th: Statistical Analysis Request (9-11 above) Reply from Jim Kotcon, Professor, WVU: Sorry for the delay in replying, I am swamped getting ready for the Organic World Congress.

I am afraid I do not understand what these numbers mean. The table shows three numbers in many of the cells, but only two units. For example, the first cell shows 7.5, 16, and a (10)*. Does this mean 7.5 pounds from 16 tomato fruits? What is that 10? The next column indicates "Ave/lb.". Perhaps a more useful number would be average weight of each tomato fruit.

As I recall, the treatments were applied to a single row. Since the treatments were not replicated, there is no easy way to analyze the data statistically. I assumed that the first number was weight of fruits harvested on the four dates, and tried analyzing the dates as if they were replicate harvests. But the second harvest was so much larger than the first that it created a large Standard deviation, and none of the treatments were significantly different.

Therefore I tried a non-parametric Rank-Correlation test. This simply looks at which treatment had the largest harvest on each date, and compares the ranks over the season. Again no significant difference occurred among treatments.

Finally, I transformed the data by converting the yields to "relative weights". I divided the weight at each harvest date by the mean of all treatments for that date. This at least puts all data into a uniform variance. But again, there was no difference among treatments.

The problem with all of these statistical analyses is that they assume that the harvest dates are "independent" samples, when, in fact, that assumption is clearly wrong because the yield at one date is very dependent on how much was harvested the previous date.

So without true replication of treatments, we really can not do statistical comparisons. Perhaps the best you can do is simply report the total yields. This shows that the Tea treatment had the highest total yield for the season, whereas the Hydrosol at 10:1 tended to reduce yield, compared to the Control. Yields with Fertrell were the second highest, but the yields appeared to be delayed compared to the other treatments (too much nitrogen?)

But we certainly can not report that these are statistically significant, as none of the tests I did showed any significant difference.

Jim Kotcon

and my reply: Thank you so much Jim for your detailed analysis of the data. I was very sorry that the research could not be duplicated by the 8 or so farmers who began the research – so mine is the only one which stayed the course. Also
the way the data was splayed out in the email is really difficult to read – it didn't look that way when I sent it. the web page is much clearer. http://www.lapaixherbfarmproducts.com/stngntlresearchprojaugust.htm with the data is 7-27 through Aug. 20th, a time span I figured was correct for commercial marketing from the U. of Ga. handbook on same.The * denotes the # of tomatoes with stink bug spots,The August 3rd chart notes by *** how many tomatoes were damaged in some way. *** being 3 tomatoes etc.
I did think the final totals on 8-20 might have shown some differences, eg.
Stinging Nettle # wt. 136.6 lb. 312 tomatoes 6.9 avg. wt.
Hydrosol 10-1: 122 lb. 258 tomatoes. 7.6 oz. avg. wt.
Hydrosol 20-1: 125.5 lb. 290 tomatoes 7.14 oz. avg. wt.
Fertrell: 112. lb. 269 tomatoes 6.7 oz. avg. wt.
Control: 115 lb. 254 tomatoes 7.18 oz. avg. wt.
Isn't there a monetary difference between a harvest of 312 tomatoes and 254 tomatoes? Especially when this is only 9 plants each and if you plant 900 plants of each the difference then is 31, 200 tomatoes and 25, 400 tomatoes, each weighing over the average of 6 oz. expected for that type of tomato? And perhaps I need to do the math again on this – hurts my eyes!
So can I extrapolate from this data that stinging nettle is a viable and helpful addition to a farmer's tomato crop? After all, the Fertrell didn't come close (and I hear that there has since been a downgrading of Fertrell as research showed ingredients in it not sanctioned). Thanks so much for your feedback _ it is very much appreciated and I wish you all success at the Organic World Congress – sounds wonderful….. Of course, after watching and hearing Chris Hedges this afternoon, I realize all middle and lower income life hangs in the balance which is totally unbalanced. I await the nutritional analysis of the tissue of the leaves – I have paid $255. for it but am worried as the samples did not get to the Lab in Idaho n an expeditious fashion and I wonder if the drying of the leaves will skew he results. Peace, thanks again Jim, not many people were willing to help
with this and I sincerely appreciate your input when you are so busy. Peace, Myra
Sept. 18th: As statistical analysis does not seem to be useful in this research, I have decided to depend instead on those who have eaten, canned and observed the tomatoes for their opinion. I will be asking the following questions: 1) What was your experience with the use of the Tappy's Heritage Heirloom tomatoes? 2) From your understanding of the research and the effect of stinging nettle formulas applied to the tomatoes, would you use either the stinging nettle tea or hydrosol on your crops? If so, which ones? I will be putting the feedback on this website and in my power point presentation which is nearly complete.

I used the tomatoes with Myra to create a delicious and visually stimulating pizza. The tomatoes, from her garden, were a beautiful color and had a very good taste. We also used the tomatoes in a basil, olive oil and vinegar, and feta salad….also delicious. Myra gave me some tomatoes to take home and I made the same salad with them. I would use the stinging nettle formula on my plants given the results I experienced Judith Vojik Former Apprentice Life-long friend	Buyer Heather Weber;The tomatoes were delicious – tangy with a subtle sweetness. I was only able to purchase a few because of time restraints, but look forward to purchasing more next year. I live in town and have a very, very small garden. Not sure I could contribute much in terms of research, but I find your project very interesting. Heather	Aijah, my granddaughter: "The tomatoes here are very very good. I like them because they're fresh from the garden and they are nice and red."
Neighbor Charlie Kraus "They're the best tomatoes I ever ate. Are you going to grow them again next Spring?"		**Shelby Wise-watkins** Aijah and Scott ate the tomatoes on everything from sandwiches to making homemade salsa with them. Scott said those were the best tomatoes he ever had.

To: All Media

From: Myra Bonhage-Hale, Steward, La Paix Herb Farm, Alum Bridge, West Virginia (Lewis County) (304) 269-7681 lapaix@hughes.net www.lapaixherbfarm.com

Re: Press Release: Power Point Presentation Saturday, October: 1st Effects of Stinging Nettle on Tomatoes

For Release: Sept. 18th, 2011

On Saturday, October 1st the West Virginia Herb Association's Fall Festival will host the first public presentation of the results of research using stinging nettle formulas to promote the growth and production of heritage heirloom tomatoes. The conference is being held at Jackson's Mill in Lewis County. At 9 a.m. in the Flameway Building, Myra Bonhage-Hale, the steward of La Paix Herb Farm, will present a power point presentation aided by Bruce Loyd, WV Extension agent in Lewis County. This project, originally applied for as a USDA Farmer Grower's Grant was not funded, but Myra states, "I think there is a pressing reason to examine stinging nettle as an efficacious addition to plants. It can be grown easily by farmers on their own land, thus
decreasing drastically the increasing cost of fertilizing with petroleum based products and reducing the carbon footprint necessitated by buying those fertilizers from great distances. For this reason and the hope of improving the farmer's life, I have spent my own money and time to do this research in organic, sustainable agriculture."

Many photos will be shown documenting the progress of the research and detailing how farmers can duplicate this process easily. If all goes well, samples of the delicious sweet tomato juice made from some of the 1400 tomatoes harvested will be served. Courageous participants will also be able to experiment with getting stung by fresh stinging nettle and then apply lemon balm hydrosol which takes out the sting almost immediately. Detailed information on the research, month by month, can be found on the website: http://www.lapaixherbfarmproducts.com/stinging_nettle_project.htm

The message is ready to be sent with the following file or link attachments:
Myra Bonhage-Hale photo.gif
Please note this photo was taken before the time, energy and money consuming research being described in the workshop. Photo of Myra Bonhage-Hale, Steward La Paix Herb Farm. (she looks older now)…..

-30-
Sept. 19, 2011:

Hi, I am emailing all of those who I remember who came and saw, ate, took tomatoes for their own cuisine. I would very much appreciate your feedback for the website and Power Point Presentation which will be given on Saturday, Oct. 1st at the WV Herb Festival in Jackson's Mills.

These are the questions I would like you to answer:

1) How did you use the tomatoes and what was your experience? If you just came to see the tomato plants growing before they had tomatoes, what was your impression?

2) Given that the tomatoes which were applied with formulas of stinging nettle were those which had more tomatoes and excellent weight, would you be interested in using a stinging nettle formula on your own plants in the future? If so, what are you plans (briefly)?

There are quite a few people who came who I do not have the email address for. If you know of any of them, please send this along to them. I'm particularly interested in Sara Bonnett, Shelby Watkins, Sara Cross, Dee Howell's daughter, Rebekah's Goddesses, and Cathy Geren Miller's opinion.

If you have a photo of yourself and the tomatoes or just you, please send that with your comments. I really appreciate the time you have spent here and there with me and my tomatoes. And come to the Herb Fair and support me and my tomatoes if you can! Peace and thanks Myra

Total to date: 8-20	Lb.	Avg. wt	# of Tomatoes
Tea	136.6	6.9 oz.	312
10-1	122.	7.5 oz.	258
20-1	129.5	7.14 oz.	290
Fert,	112	6.7 oz.	269
Contr.	114	7.18 oz.	254

Email from Barbara Liedle, 9-20-2011: I am not familiar with this laboratory but have the following sufficiency ranges from tests I had done on tomato from another lab. Hope this helps.

%Nitrogen 4.5-5.5 %Phosphorus 0.6-0.9 %Potassium 4.0-5.5 %Calcium 2.2-3.0 %Magnesium 0.5-0.8	ppm Fe 80-125 ppm Mn 80-125 ppm Boron 40-60 ppm Copper 15-25 ppm Zinc 20-40 ppm Molybdenum 1.0-3.0	So if you look at your results: Nitrogen, Magnesium and Iron: all were normal **Phosphorus, Potassium, Calcium, and Boron: all were low** **Zinc:** 3 20-1, 4 Fertrell, and 5 control were all low but not by too much **Manganese**: 1 tea, 2 10-1, 4 Fertrell and 5 control were all low. **Copper:** 3 20-1 was low but not by much

Barbara E. Liedl, Ph.D. Associate Research Professor West Virginia State University Gus R. Douglass Institute Agricultural and Environmental Research Station 100 Toney House Institute, WV 25112-1000

OK here it is on Sept. 20, 2011 – my rant, my diatribe and Einstein: (email to a friend who is an editor) quote from Einstein: "If you can't explain it simply, you don't understand it well enough".

By the way, the tissue analysis of the 5 rows of tomatoes came back last night from the Lab. Not much difference. I thought and thought – and then realized that the scientists, most of whom are employed by the fertilizer petroleum business
(chemicals isolating various perceived nutrients, eg. K, N) have it all wrong. There is something much much more, much more comprehensive, much more spiritual in growing things. So I thought, "What counts doesn't Matter and What Matters doesn't Count."

If you think about quantum physics and the idea that all pieces of energy (laymen's terms – mine too) are in a vast amount of space (I have been obsessing on the space between and that we are all connected for a while – have you seen Mindwalk or Dinner with Andre?) hurtling back and forth but not in isolation totally dependent on one another to keep going – and very hard to count – really not possible I think – then Matter doesn't Count and Count doesn't Matter – in other words all the scientific theory I have been awkwardly using to determine the efficacy of stinging nettle is wrong – the property of corporations who want to sell their chemicals and conquer nature (which includes the fools who buy their product) – and it is wrong.

Think about it: Say think about love. You can't count it – it just is – fluid and unique and full of emotions and feelings and interdependence and – can't count it. So why does stinging nettle help plants to grow? What is going on? Maybe all we need to know is that applying it to plants (and perhaps talking to and loving the plants while doing so- believing in the plants, supporting them, tending them) helps the plants grow and perhaps even taste better. So what are my measures then? What do I count? I count the photos of the plants and how they look – I count the people who saw them, ate them, canned them and
talked about it. There is no standard deviation here, there is no mean, no average – so what do we call this? I shared my sudden insight with my daughter, Kathleen, last night, who said that as director of the pre-school programs in Fayetteville Arkansas she had spent all day evaluating test results of their teaching and came to the same conclusion – What they were
counting didn't tell them what the children had learned – and she also said Einstein came up with the same conclusion. This was his wording: ***"Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted."***
Now going to look up Einstein and then go can the green tomato relish I made yesterday.
Additional thought: My friend, Elaine Ferry, a certified inspector of organic farms, and my supporter, Jim Kotcon WVU professor, both came up with some interesting thoughts earlier in this research – both hypothesized that stinging nettle did something in the earth to make the earth more conducive to growing – it wasn't necessarily the usual suspects N K and P etc. (this last my wording).

Sept. 20, 2011: What We Can Count On

Einstein: "We can't solve problems by using the same kind of thinking we used when we created them."
"Intellectual growth should commence at birth and cease only at death."
"There are two ways to live: you can live as if nothing is a miracle; you can live as if everything is a miracle."

"Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning."
"Logic will get you from A to B. Imagination will take you everywhere."
"Imagination is more important than knowledge. For knowledge is limited to all we now know and understand, while imagination embraces the entire world and all there ever will be to know and understand."
"The true sign of intelligence is not knowledge but imagination."

Sept. 25th: With help of son, Bill, took soil samples from each of the five research rows. A l/2 trowel full of soil was taken from each row three times, at the beginning of the row, the middle and the end of the row. Due to excessive rain, soil was still quite wet and was left to dry in separate baskets in the house before mailing to WVU Soil Laboratory.

Sept. 26th: Met with Bruce Loyd, Extension Agent, Lewis County, to go over power point presentation – for content and ease of presentation. Bruce gave me many pointers on content, darkening all photos and text as the ppt shows very light and bleached out on presentation and elaborating on content for simplification and understanding. I worked on improving the PPT for many hours on the 26th and 27th. Having a great deal of difficulty transferring ppt from pc to lap top. Consulted both Bruce and Justin Goodwin (computer expert) on how to transfer as my Dell computer has the "worst USB port in the world" according to Justin. I have managed to transfer the redone presentation to a CD and Bruce will also bring his computer to the presentation on Saturday.

Sept. 28th: All five samples of soil mailed together in Priority Box by USPS post office in Alum Bridge. Serendipitously met Lee Stalnaker (who has visited research plot at La Paix and bought tomatoes for canning and recipes) at Uptown Attitude where we both were having our hair done. Reaffirmed that Lee and Brian Gainer will be helping me at the presentation on Saturday. Received testimony from former apprentice Judith Vojik, who visited a few weeks ago from Tenn.

The Weston Democrat, local weekly paper, out today, printed a former press release instead of the one above. That press release did not have information on the rest of the WV Herb Association Conference – I am disappointed that it did not get covered by the local paper.
Oct. 1st: Presentation at Jackson's Mill:

Join me at the WV Herb Association Fall Herb Festival on Saturday Oct. 1st for my Power Point presentation: "Tomatoes to Einstein" – research on the Efficacy of Stinging Nettle as a Fertilizer.

First page of Power Point Presentation	From left: Bruce Loyd, WVU Ext. Lewis County, Myra, Tim Kozak, Mary Ellen Davidson – testing stinging nettle and getting stung! PPT Oct. 1, 2011 Jackson's Mill.
Presenting at Jackson's Mill.	The Power Point Presentation at the WV Herb Association Fall Herb Festival at Jackson's Mill was quite successful – Bruce Loyd WVU Ext. Agent for Lewis County helped me with the presentation and Liz Post of WVU Ext. Lewis County set up the projector prior to the presentation. About 12 people attended and there was lively back and forth during the workshop and lots of clapping at the end.

I was surprised at the Party that afternoon when I was honored to be the herb person of the year (or something like that) with a lovely calligraphy art piece by Carol Scweiker and people saying nice (well, wonderful) things about me over the 25 years or so of our association. Photo below: from left Lis Caudill, Kathy Flewelling (in background), me, and Carol Scweiker, Artist.

Oct. 3rd press release sent out:

From: lapaix

To: Bruce Loyd

Cc: Barbara E. Liedl ; Tom McConnell ; Lewis.Jett@mail.wvu.edu ; Stacy Jacobson ; Weston Democrat ; Clarksburg Exponent-Telegram ; Jim Kotcon ; Appalachian Studies ; HerbBusiness@yahoogroups.com ; Pam Kasey State Journal

Sent: Monday, October 03, 2011 12:35 PM

Subject: Emailing: Stinging Nettle PPT press release10-11.jpg

To: All media

From: Myra Bonhage-Hale, Steward La Paix Herb Farm, Alum Bridge West Virginia 26321

Re: From Tomatoes to Einstein: Researching the Efficacy of Stinging Nettle as a Plant Enhancer.

Date: For Immediate Release: Oct. 3rd, 2011.

Myra Bonhage-Hale, Steward of La Paix Herb Farm in Alum Bridge, West Virginia states: "I will be happy to present a Power Point Presentation on my research project: Does Stinging Nettle Enhance the Growth of Tomatoes? subtitle: From Tomatoes to Einstein , and will be submitting it to several future venues. It is my opinion that stinging nettle hydrosol in a ratio of 20 water to 1 of hydrosol enhances the growth of tomatoes, their production and their weight, as well as their flavor. In addition, I believe stinging nettle tea and an application of 10 water to 1 of stinging nettle hydrosol are also efficacious, and that this is borne out by my research. The nutrients or biological processes which do this so far are not known. Please see my website for more details than you probably care to see. I believe that stinging nettle fertilizers can be grown by farmers almost anywhere in the world, and can be harvested and used by them, thus eliminating the carbon footprint and the use of commercial fertilizers made from petroleum and chemicals. This could revolutionize farming everywhere, enhance the soil the stinging nettle is applied to, rather than depleting the soil as many commercial non-organic fertilizers. It could perhaps help deter the predicted world wide food famine. It could be used by every home gardener. It would mean true independence by the famers and gardeners using it."

Myra Bonhage-Hale, Steward La Paix Herb Farm. Find out all about La Paix at http://www.lapaixherbfarm.com

The message is ready to be sent with the following file or link attachments:
Stinging Nettle PPT press release10-11.jpg

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Oct. 10, 11, 12th Master Gardener's Nat'l Conference: WVHerb Association Table: 14 of my 15 bags of dried stinging nettle sold (the 15th bag was hidden by mistake) at the Conference – mostly to people from out of state – Fla. and California etc.

Oct. 19, 2011: Soil Sample Analysis received from WVU:

Oct. 21, 2011: email sent to my friends, research group and experts asking for analysis of the above data.

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