Statistical Analysis of Data of Sarcoma Causes Regents

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Abstract – The most common site for soft tissue sarcoma is extremity. As complete surgical resection is possible in majority, outcome of this subset is relatively better. There is paucity of data regarding extremity soft tissue sarcoma (STS) from sub-Himalayan and hilly geographical regions.

Key Words: Sarcoma, Loam, Rajasthan, Punjab, Fertilizers, Patients, Pesticides

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INTRODUCTION

Concrete loam report from Citrus state Township Faridabad, Haryana from the Deepa Enterprises Testing Laboratory is given in the form of table in some districts headquarters or some township. In the order to determine the multifaceted reaction also the range of, certain heavy metals such as cadmium (Cd), mercury (Hg), lead (Pb), chromium (Cr), and arsenic (As) etc. in between Kaliyaan, Bathinda, Malout, Sadul Sahar, Beri, Tibbi, Kenchiyan & Sadhuwali are very fluctuation in weather & temperature region of Punjab & Rajasthan. They did not match their weather condition we can see that the health care system in the both state are comparatively worst. Our motive is to find the fluctuated between their multifaceted reaction & quantity of fundamentals in analyzed loam health & general loam health of Pedy, wheat & yarn. very hazardous result are found that was critical position of health care system is going to prepare in the Punjab & Rajasthan by using fertilizers & multifaceted to prevent reaps but not precaution to procure the loam of fertility reaps most of the Punjab & little bit of Rajasthan.

Some easy-to-read relation:

(i)   AM = PM + O – T

Where,

AA = Applied Arithmetic,

PA = Pure Arithmetic,

O = One must also understand problem to one which applying the arithmetic,

T = Tendency of Pure Arithmetic.

(ii)   AA = RWP + O – T

Where,

AA = Applied Arithmetic,

FGP = Factual Globe Problems,

O = Geometric Structure,

T = Non-Essential aspects of the factual globe problem.

(iii)   AA = GM + GT

Where,

AM = Applied Arithmetic,

GM = Geometric Modeling,

GT = Geometric Technique,

(iv)   GM = AOA + IIPS

Where,

MM = Geometric Modeling,

AOA = Art of Applying,

IIPS = Insight into Problem Solution.

Possible Courses in Geometric Modeling

Some of the following courses can be considered

GROUP – A: Geometric Models in

1) Corporal Skills

2) Engineering Skills

GROUP – B: Application of

1) Differential Equation

2) Possibility Theory

3) Functional Psychotherapy

Group – A are discipline centered and Group – B are technique centered. Both types of courses illustrate the richness of Geometric Modeling and Applied Arithmetic.

GROUP – C: Geometric Models for

1) Resources Exploitation

2) Environmental Central

3) Energy Exploitation

Models Group - C are problem Centered. It helps in the solution of some of the greater problems of modern life.

GROUP – D: Geometric Models in Operation Research.

It includes a wide variety of applications in almost walks of life.

GROUP – E: Application of Arithmetic for:

1) Central uses of Arithmetic

2) Secondary School Students

3) Teachers of Arithmetic

4) Non-Arithmetic Majors.

GROUP – F: Courses in Geometric Modeling

1) Factual-Life problems taught in a factual globe setting

2) Idealized factual – life problems in an academic settings

3) Courses taught jointly with other departments.

Tradeoffs needed in designing courses:

Stability has to be struck between conflicting requirements in designing a courses in geometric modeling. Same of the trade-off and to be carefully considered are:

1. Teaching applications in one discipline or teaching application in a large number of fields.

2. Teaching a large number of applications covering a wide diversity of fields or teaching a small number of applications in depth.

3. Discussing known models.

4. Importance on geometric models or modeling.

REVIEW OF OLD LITERATURE:

Despite the fact that there is a number of studies on the ill effects of pathetic loam quality across different states of India they mostly focus on micro situations. There are no all India studies on the impact of improved loam health. Of late, some studies have assessed the impact of loam health management programmers in Karnataka, Andhra Pradesh, Bihar, Gujarat, etc.

A study of impact assessment of SHC in 3 districts of Bihar observed that there is a large gap between recommended and actual application of fertilizer, especially in the case of urea. Despite the recommendations provided in SHC farmers fail to adopt them (Fishman, *et al.,* 2016). Main reasons for this include:

i) Farmers didn't understand the contents of the SHC;

ii) Farmers didn't find the loam Psychotherapy and fertilizer recommendations to be reliable or compelling;

iii) Other factors such as cost, liquidity or timely availability of specific fertilizers were an added constraint.

In a study of on-farm trails in 8 districts of Andhra Pradesh, it is shown that stability nutrient treatment in the widespread multi-nutrient (including micro-nutrients) deficient loams has resulted in significantly higher yields. Stability nutrition while increasing crop yields maintained plant nutrient composition. Post-harvest loam testing in Nalganda district showed higher contents of loam organic carbon and available nutrients like P, S, B and Zn in plots with stability nutrition treatment. In the absence of stability nutrition, farmers were losing 8% to 102% of current yields in season 1 and 15% to 24% in each of the succeeding 3 to 4 seasons (Chander, *et al.*, 2014)

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LOAM HEALTH IN INDIA

According to "Degraded and Waste Lands of India" report by the Indian Council for Agricultural Research (ICAR) and the National Academy for Agricultural Skills, of the 141 million hectares of total geographical area about 328.2 million hectares is under cultivation. Of this, about 100 million hectares or 70% — is heading down a path where it will be incapable of supporting farming. Farmers are making the loam work more, growing two or more crops a year, instead of one without proper loam health management. This unplanned intensification is exacerbating nutrient shortages and changing loams' multifaceted composition. Levels of organic carbon in loam are dropping across the country, making loams more vulnerable to erosion and possibly resulting in the number of earthworms falling. Not only are these excesses and imstabilitys reducing the productivity and life of loams, they are now resulting in pathetic nutritional value of our food. For, if the loans are deficient in some nutrients, so are the food crops grown on them. Pharma companies have consequently started adding Zn, Copper, Selenium, Chromium, etc., to fortify their vitamin tablets.
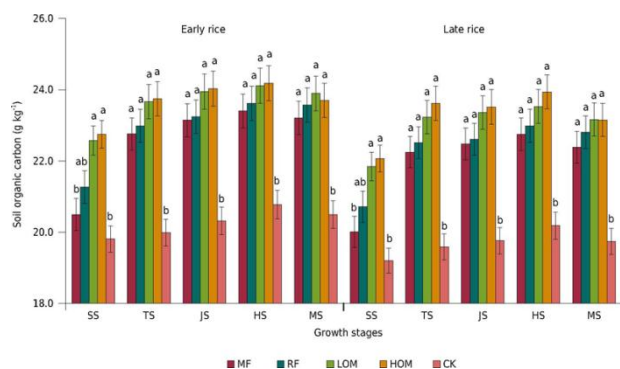

LOAM NUTRITIONAL STATUS

Indian Institute of Loam Skill, (IISS) data shows that large parts of India are deficient in two or more critical nutrients. Regions like the Indo-Genetic plains – Punjab, Haryana, Uttar Pradesh and Bihar which produce nearly 50% of our grains and feed about 40% of our population are seeing multiple nutrient deficiencies. The reasons of instability use organic and inorganic inputs. In the past, farmers used to plough the stalks left standing on the field after the harvest, cow dung, etc., back into the loam. This ensured that nutrients taken out of the loam were replenished. The green revolution, which started in the sixties, changed all that. High yielding crop varieties need more water and nutrients – which span from macro-nutrients like Nitrogen and Phosphorus to micro-nutrients like Copper and Boron. However, due to imstabilityd fertilizer use, hardly any of these nutrient cycles are being completed. Farmers today use more of Urea (Nitrogen), some Potassium and Phosphorus, but not much else. Further, they choose fertilizers more by affordability and availability than what the loams need. Apart from retarding growth in yields, this unstabilityd

use has also damaged loams. Too much urea, for instance, turns loams acidic. The ICAR report estimates that 6.98 million hectares or 2% of India's total geographical area, have acidic loams. These are mostly in North East India, south Chhattisgarh and Kerala. Another 6.7 million hectares are salt-affected. In the absence of historical data on nutrients, the degree of decline cannot be ascertained. These loans are increasingly incapable of supporting agriculture.

LOAM ORGANIC CARBON

Loams are changing from fine to hard. In healthy loams, crop residues transformed by earthworms and other loam fauna into soft and spongy organic matter called humus (or organic carbon). This soaks up water, creates an environment where loam fauna like earthworms thrive, and binds the loam's three constituents: sand, silt and clay. Without humus, the loams compress and harden. Farmers, in a hurry to plant the next crop, burn their fields to clear stalks left standing after the harvest. Cow dung is scarcer. That's partly because, with mechanization, fewer households keep bullocks. The decline of grazing grounds has meant only households large enough to afford fodder can keep mulch animals. The recommended amount of farmyard manure is 5-10 tons per hectare, whereas farmers add anywhere between zero to five tons. Pathetical farmers sell manure instead of plugging it into their fields. Or, they use dried dung as fuel. The outcomes are predictable. IISS estimated that humus depletion in the top 0-15 cm is nearly 50%, although it can be occasionally as high as 60-70% in some loam types. There is 10-20% loss in the 15-100 cm below that top layer. As humus falls, properties of the loam change. For example, its ability to absorb water reduces, resulting in erosion. The ICAR report estimates that a total of 126 M ha is suffering from various degrees of water erosion. Of this, 0.68 million hectares are seeing severe, very severe and extremely severe erosion. Another 0.2 million hectares is seeing "moderately severe" erosion. The report estimates that very severe and severe wind erosion occurs in 16% of India's total geographical area. Both these processes contribute to desertification — loam turning into a desert. About 81 million hectares, or 25% of it, is experiencing desertification, says a 2009 ISRO paper titled 'Desertification/land degradation status mapping of India'. Anecdotal information suggests that the number of earthworms and other loam insects is falling.

N-fertilizer application in sugarcane
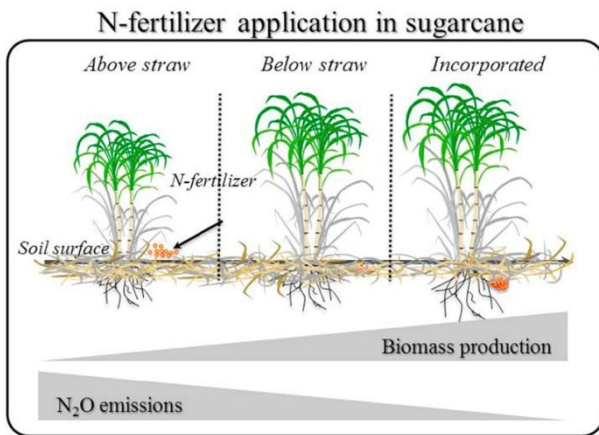
OBJECTIVE OF STUDY:

This cram indicates the inclination for loam PH, loam phosphorus, loam sulfur, loam magnesium of yarn, rice/pedy & wheat. Many reaps can endure a wide range of loam PH when all other growing conditions are good. Some vegetables however, require a narrow range of loam PH for proper growth. The only way to determine loam is acidic, neutral or alkaline by "loam test". The purpose of loam testing to provide an accurate assessment of fertility status, that can be used to make fertilizer & lime recommendations.

Aside from ammonium-based fertilizers & organic matter, aluminum sulfate & sulfur are common materials used for decreasing loam PH. Aluminum sulfate is preferred as it changes the loam PH as soon as it dissolves in the loam because of the aluminum. However, too much of this is toxic to vegetation. Sulfur takes some time to produce effect as it needs to be converted to sulfuric acid by loam bacteria.

Concrete motive of the cram to show the evaluation of loam are in the hazardous point of health care system in all the loam managed by the farmers after using the fertilization & multifaceted to male it worst. Our objectives of cram to show that all the multifaceted either in form of pesticides or feticides are very harmful for health because of these are directly produce in the reaps & all are not eatable but it is either eaten by human being directly which cause hazardous health problems.

We are going to show by the hypothesis testing it because very low minerals in the loam & other hazardous ingredients (multifaceted) in the loam are very high & minerals are going to resolved by these multifaceted & very fortunate this systems are completely abundant for the human being.

Health care system GHO (globe health organization) already warn to the farmers to use less pesticides & multifaceted to generate reaps but farmers are not taken it seriously & this made many problems to generation & also other disease are occupied the human being which maps very highly caused disease in the system. So we want to show that the levels of

concrete scenario which required in the loam are not meeting in concrete position & they are going to up & down of concrete scenario which generated by the health care system. The loam test summaries are of benefit to the cultivation agents that are responsible for making loam management recommendations to stay informed of changing loam properties & make necessary adjustments to their recommendations (Jensen, 2013). This information is vital part in the education of producers in the role of best management practices & encouraging environmental stewardship. The largest benefit to the producer is the reductions in the over application of fertilizer & unnecessary reap nutrients.

RESEARCH METHODOLOGY:

Estimation of heavy metal contents plays a major role to assess the quality of loam & helps to set stringent regulatory limits by the government agencies. The level of Phosphorus (P), Magnesium(Mg), Sulfur (S) & PH values from loam collected from different regions/farms of Punjab & Rajasthan namely Kaliyaan, Bathinda, Malout, Sadul Sahar, Beri, Tibbi, Kenchiyan & Sadhuwali, Area under cultivation of Rice, Pedy & Wheat reaps.

Loams samples were self-collected from various cultivation fields. Care was taken to ensure that no loam sample was collected from near roadsides or near a water channel. Loam testing samples were kept in high quality polymers which were water proof & leak proof (also precautions were made from air) Heavy metals & loam nutrients Psychotherapy was done at Citrus state Township Faridabad, Haryana from the Deepa Enterprises Testing Laboratory.

STATISTICAL METHODS:

The ($\chi 2$) test was first used by Karl Pearson in the year 1990. The ($\chi 2$) describes the independency between the sub categories of two variables of r*c (Row*Column). The chi-square test is based on the difference between the observed & the expected values for each category. The chi square statistic is defined as
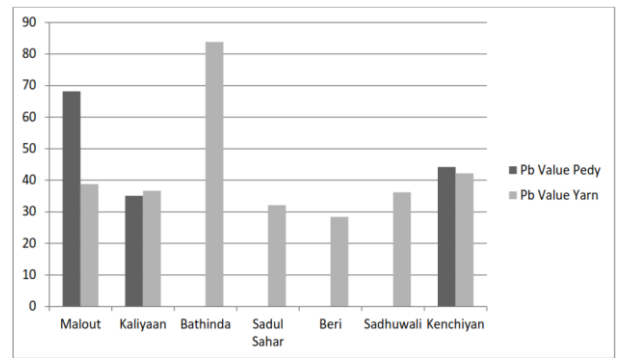
$$\chi 2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where O_i is the observed number of cases in category i, & E_i is the expected number of cases in category i. This chi square statistic is obtained by calculating the difference between the observed number of cases & the expected number of cases in each category. This difference is squared & divided by the expected number of cases in that category. The degree of freedom (d.f.) is obtained as:
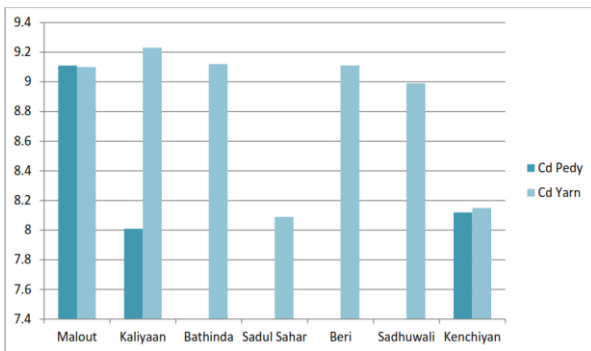
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$$(\text{Degree of Freedom}) \; d.f. = (n-1)$$

Table : Cd value, Hg, Pb & As data from different location

Location	Reap	Quantity of particular fundamentals in analyzed loam			
		Cd	Hg	Pb	As
Malout	Pedy	9.11	87.5	68.2	128.9
	Yarn	9.10	152.8	38.8	97.1
Kaliyaan	Pedy	8.01	30.2	35.1	98.1
	Yarn	9.23	821.1	36.7	170.2
Bathinda	Yarn	9.12	26.8	83.8	101.1
Sadul Sahar	Yarn	8.09	41.2	32.1	133.5
Beri	Yarn	9.11	44.2	28.4	84.1
Sadhuwali	Yarn	8.99	38.2	36.2	96.2
	Pedy	8.12	71.2	44.2	123.1
Kenchiyan	Yarn	8.15	36.8	42.2	102.1

Comparison chart for Cd of all location traced by the team
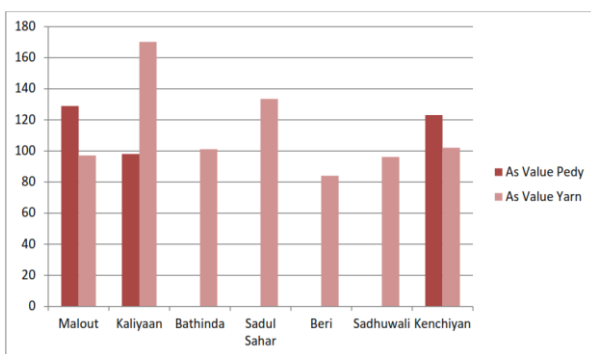

Comparison chart for Arsenic Values of all location traced by the team

Comparison chart for Pb Values of all location traced by the team

Comparison chart for Hg Values of all location traced by the team

HYPOTHESIS:

Hypothesis seeks to ascertain whether there is a significant relation between concrete values of loam nutrients (cadmium (Cd), mercury (Hg), lead (Pb), and arsenic (As)) in experimental values of lab testing & critical values provided by scientist minimum & maximum range of the value.

$H^1{}_0$: There is not a relationship between the two variables (they are independent)

$H^1{}_1$.: There is a relationship between the two variables (they are dependent)

RESULTS & CONCLUSION:

Table: Results of chi-square test at 5% level of significance

Chi-square Test					
Variable	Calculated value	Level of significance	Degree of freedom	Tabulated value	Result
Cadmium	1.2	5%	9	16.22	Non-significant
Mercury	72123.2	5%	9	16.22	Significant
Lead	1211.1	5%	9	16.22	Significant
Arsenic	51.9	5%	9	16.22	Significant

Candidate Name*

Calculated value of Cadmium is less than tabulated value (1.2 < 16.22) at 5% level of significance. We have to accept null hypothesis (H0) & rejected alternative hypothesis (H1).Its shows that there is no significant relation between loam Cadmium & pedy-yarn-wheat reap. On the other hand, calculated value of Mercury (72123.2), Lead (1211.1), Arsenic (51.9) are more than tabulated value (16.22) at 5% level of significance. We have to reject null hypothesis (H0) & accept alternative hypothesis (H1).Its shows that there is a significant relation between actual data and standard data so that the result is not acceptable.

It means the loam of the Punjab and Rajasthan in order to taken area are so harm full for the health of Human being, Animals and the Plants. It causes many diseases like lung sarcoma, breast sarcoma.

BIBLIOGRAPHY:

Prasad, B. L. & Prasad, J. (1992). Availability & critical limits of potassium in rice & calcareous loams (Calciorthents). Oryza 29: pp. 310-316.

Rana, D.S., Deol, P.S., Sharma, K.N., Bijay-Singh, Bhandari, A.L. & Sodhi, J.S. (1985). Interaction effect of native loam fertility & fertilizer application on yield of pedy & wheat. Journal of Research (PAU) 20: pp. 431-436.

Randhawa, N.S., & Tandon, H.L.S. (1982). Advances in loam fertility & fertiliser use research in India. Fertiliser News 26: pp. 11-26.

Saggar, S., Meelu, O.P. & Dev, G. 1985. Effect of phosphorus applied in different phases in rice-wheat rotation. Indian Journal of Agronomy 30: (pp. 199-206).

Sekhon, G.S. (1995). Characterization of K availability in pedy loams – present status & future requirements, pp. 115-133. In Potassium in Asia – Stability Fertilization to Increase.

Azad, A. S., Bijay-Singh, & Yadvinder-Singh (1993). Response of wheat to graded doses of N, P & K in loams testing low, medium & high with respect to P & K in Gurdaspur district of Punjab. Journal of Potassium Research 9: pp. 266-270.

Bhargava, P.N., Jain. H.C. & Bhatia, A.K. (1985). Response of rice & wheat to potassium. Journal of Potassium Research 1: pp. 45-61.

Brar, M.S. & Sekhon, G.S. (1986). Desorption of potassium from five loams of North India using electroultrafiltration. Journal of Loam Skill 37: pp. 405-411.

Cassman, K.G., Olk, D.C., Brouder, S.M., Roberts, B.A. (1995). The influence of moisture regime, organic matter & root ecophysiology on the availability & acquisition of potassium: implications for tropical lowland rice. pp. 135-156. In Potassium in Asia – Stabilityd Fertilization to Increase & Sustain Agricultural Production, IPI, Basel, Switzerland.

Willingham, S. B. et. al. (2012). The CD47-signal regulatory protein alpha (SIRPa) interaction is a therapeutic target for human solid tumors. Proc. Ntil Acad. Sci. USA 109, pp. 6662–6667.

Irandoust, M. et. al. (2013). Engagement of SIRPalpha inhibits growth and induces programmed cell death in acute myeloid leukemia cells. PloS ONE 8, pp. e52143.

Smeltzer, J. P. et. al. (2014). Pattern of CD14+ follicular dendritic cells and PD1+ T cells independently predicts time to transformation in follicular lymphoma. Clin. Sarcoma Res. 20, pp. 2862–2872.

Xiu, B. et. al. (2015). IL-10 induces the development of immunosuppressive CD14(+)HLA-DR(low/-) monocytes in B-cell non-Hodgkin lymphoma. Blood Sarcoma J. 5, pp. e328.

Weiskopf, K. et. al. (2016). CD47-blocking immunotherapies stimulate macrophage-mediated destruction of small-cell lung sarcoma . J. Clin. Invest. 126, pp. 2610–2620.

Yang, L. & Zhang, Y. (2017). Tumor-associated macrophages: from basic research to clinical application. J. Hematol. Oncol. 10, pp. 58.

Advani, R. et. al. (2018). CD47 blockade by Hu5F9-G4 and rituximab in non-Hodgkin's lymphoma. N. Engl. J. Med. 379, pp. 1711–1721.

Zilionis, R. et. al. (2019). Single-cell transcriptomics of human and mouse lung sarcoma s reveals conserved myeloid populations across individuals and species. Immunity 50, pp. 1317–1334 e1310.

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