T B Wood & F. J. M. Stratton. J. Agric Sci Vol 3 417-440

The Interpretation of Experimental Results.

✓ ~~1000~~ 1050. plots mangolds $\frac{1}{1000}$ acre each no yields given

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H Evans: Some Preliminary data concerning the best shape and size of plot for field experiments with sugarcane

Dept of Agric. Mauritius 1934

Sugarcane Research Station. Bull. No 3.

Sugarcane yield of ~~12~~ 1200 mdl stools

✓ Size of field not given.

Batchelor, Parker and Mc Bride:

Studies preliminary to the establishment of a series of fertilizer trials in a bearing citrus grove.

	Agric Exp Sta.	Citrus Exp Sta
Mangs	Univ. of Calif. Bulletin 451.	1928
	Prov. same as Hilgardia	1922-7.
	not same as. B&R.	J A Res Vol 12

A B Culham, J Steele & G G Audinleek.

Variations in the Yields of Cacao trees at Asuansi Experiment Station

Mitra. S.K. & Ganguli. P.M. Uniformity trial in rice: Proc. 21st Ann. Indian Science Congress. Bombay p 71 (1934)

Vaidyanathan M (1924) do. in sugar-cane. p 69

Kulkarni R.K. and S. Bose: (sorghum). Indian Jour Agri Sci. (in press)

Kalamb Patel

Kulkarni, Bose and Malalasekera. (1936)
Indian Journal. Agric Sci,
The influence of shape and size of plot on the effective precision of field experiments with sorghum.
160 plots each $(\frac{1}{160})$ acre (8 rows 15 metres)
for 1930-1-2
All yields given.

7.

$\frac{1}{2}$ 15 ~ 30
$\frac{5}{4}$ · $\frac{17}{3}$
$\frac{1}{2}$

(1.33 × 22.5)

Gorski M u. Stefanow M.

Die Anwendbarkeit der Wahrscheinlichkeitsrechnung bei Feldversuchen.

Landw. Versuchsstationen Vol 90 1917 pp 225-240

Oats 200 plots (3 yields missing) each 9 qm.

300 plots 9 qm.

shape of plot not given.

R.K Kristensen: Anlaeg og Opgørelse af Markforsøg

Barley 234 plots ~~shape~~ ? (6.24 × 8.79) metre.

Yields given

~~Z Jakowski~~ Z Jakowski unpublished. see Negva.

Potatoes: single rows. 1929.

Stefan ~~St~~ Bartoracki. ~~Maurice de~~ Refe.

N content of barley 96 sq. plots 1 m. × 1 m

~~Yield~~ Data given

Engl. little Studies in barley III Variation and inheritance of nitrogen content of the grain of pure lines and hybrids

2 polish Eglish summary

Lehmann: A. . Dept. of Agric. Mysore State 1900/1-01 - 1904/5

(18)

Ragi (eleusine coracana)

yields for 3 years (plots $\frac{1}{10}$ acre)

Tedin

Field I (Askov)	R K Kristensen Tids. for Planteavl 31 (1925)	6·2 × 8·8 m	Barley
II III	Merca Hall wheat smengelse given by Harris in	American Naturalist (1915) Vol 49 p435	
IV	E G Montgomery :		Wheat
V	B R Hansen : Tids for Planteavl (1906) V12 p344	5×5 m.	Timothy hay
VI	Harris . J. Agric. Res. V 19 279-314	23⅓ × 49¼ ft	Alfalfa 1909 2nd cut
VIa	do	"	3rd cut.
VII	N A Hansen Tids for Planteavl. 1915.	25 plots per acre 50 square metre	1907 oats 1908 rye 1909 barley
VIII	" " " "		1910 swede 1911 barley.

Strickland, A.C., Forster, H.C. and Vasey, A.J.: A Vine Uniformity Trial
Pub. J. Agriculture of Victoria Vol 30: No 12 pp 584 -
1932

Grapes 200 vines 8 feet apart in rows 10 ft. apart. Field grid

Shen: Li-Yung: Agricultura Sinica. 1934 Vol: 107-50

Rice

J. O. Morgan. Some Experiments to determine the uniformity of certain plats for field tests (1908)

Proc Amer Soc Agron Vol 1 p 58-67

(13) ✓

Wheat followed by fodder corn

63 plot each (15 × 112½) feet. ($\frac{1}{25}$ ac. ? inf)

yields given.

Montgomery E. G. Variation in yield and methods of arranging plats to secure comparative results. 1911

(14) ✓

Nebraska Experiment Station 25th Annual Report 1911 pp 164 - 180.

Wheat

Data given: same as EGM 1913 US Dept Agr Bull 269.

yields & N contents

Farrell

F D Fred

US Dept of Agriculture Bureau of Plant Industry Circular No 109 1913

Interpreting the variation of plat yields.

(14) ✓

Wheat 1911 66 plots ($\frac{1}{4}$ acre)

Oats 1911 68 " ($\frac{1}{4}$ acre)

Yields given in Harris + Schofield 1920.

Sugar-beet 1911 46 " ($\frac{1}{4}$ ") two fields

alfalfa 1912 - - - same field

alfalfa 1912 10 " ($\frac{1}{4}$ ") Huntley

data not given.

J A Harris Practical Universal.

Data cited: Hartgueyo Wheat · (1913) Given

Mercer & Hall's mangolds

T L Lyon's potatoes .

Stewart's ..

Holtsmark Hansen's Timothy Hay.

Landw. Vers. Stat Bd. 65 Heft. 1/2 pp 1-22

alfalfa. : Montana expt. Sta 1912-14.

46 plots ($\frac{1}{4}$) one acre.

(sometimes $\frac{1}{2}$ $\frac{1}{3}$ or $\frac{1}{4}$ plot yields given)

data of F. D Farrell. .

F. I. Stewart : missing hills in potato fields: their effect upon the yield

New York Agricultural Experiment Station

Bulletin No 459. March 1919.

(15) ✓ 420 plants, every fifth hill missing,

Potatoes. Yields per plant and number of tubes counted given.

Holtsmark G. u. Larsen B.R. 1904

Über die Fehler, welche bei Feldversuchen durch die Ungleichartigkeit des Bodens bedingt werden.

(16) ✓ Landwirtschaftlichen Versuchs-Stationen Bd. 65 Heft 1-2 pp 1-22.

Timothy Hay : 240 plots (5 metre square) Yields given.

4) N A Hanson: Provedyrkning paa Forsøgsstationen ved Aasslev.
Tvds. for Landbrugets Planteavl (1914) 21, 353.

1) 30 plots 1906–11

✓ 1907 oats 1908 rye 1909 barley 1910 mangolds 1911 barley

2) 128 plots

1906 oats 1907 barley, 1908 "seeds", 1909 rye.

Yields given

5) also H C Sanders

	Grain				Straw			
	1933	1934	1935	1936	1933	1934	1935	1936 ~~1936~~
	24.9	34.4	24.9		46.9	52.7	52.7	
B.	32.8	35.7	29.6		64.7	59.2	44.1	
Omitting B.	23.6	34.2	24.6	25.1	43.9	51.6	53.6.	47.4

M.A
Bailey and Trought T. 1926 : An account of experiments carried out to determine the experimental error of field trials with cotton in Egypt.
Min. Agric. Egypt. Tech + Sc. Servs, Bull 63.

Davies J.G. 1931. The experimental error of the yield from 460 plots (~~1/40 acre~~ 1/1000 acre) small plots of natural pasture
yields given
Comm. Sci. + Indust. Res (Aust) Bull 48

Smith H.F. A blank experiment with very small plots of wheat. 0.5 sq feet 1080 plots

Wiebe: G A. 1935 Variation and correlation in grain yield among 1500 wheat nursery plots
J Agric Res. 50. 331-357

~~0.5 sq. feet. 1081 plots~~
1.5 sq. feet 1440 plots.

3) CH Goulden: 2400 304 square yard plots of ~~wheat~~ barley data extensive.
FJ Pound: Trees ~~on~~ Cocoa trees. since 1914

$$m + \sigma\tau = \bar{x} + st$$

$$f(t, \tau)\, dt$$

$$\int \frac{1}{f} \left(\frac{\partial f}{\partial \tau}\right)^2 dt$$

Lyon T.L: 1912: Some experiments to estimate error in field plat. tests. Proc Amer Soc Agron vol 3 p 89-114

~~Brown~~ 1 ~~42~~ feet rows.

~~Stew~~ Stewart F.C. 1919. Missing hills in potato fields: their effect upon the yield. N.Y. Agr. Exp Sta Bul. 459 p 45-69 ~~ex~~ : 1

Kiesselbach: J. Amer Soc Agron vol 11 No6 p235-41 Oats

Montgomery E.G 1913. Experiments in wheat breeding: experimental error in the ~~corn~~ nursery and variation in nitrogen and yield. U.S. Dept. Agric Bur. Plant. Indus. Bul 269.

b) Stockberger W.W: 1916: Relative precision of formulae for calculating annual plot yields: J. Amer Soc Agron. Vol 8 No 3 p 167-175

Hops. 30 rows (1 210 feet rows) 1909-14 Yield given each year.

Coombs. G.E & Grantham J: 1916: Field Experiments and the interpretation of their results: Agr. Bul. Fed Malay States vol 4 No 7 p 206-16.

Rice. ($\frac{1}{2}$ x $\frac{1}{2}$ chain)

Holtsmark G & Larsen B.R. 1906

über die Fehler, welche bei Feldversuchen durch die Ungleichartigkeit des Bodens bedingt werden.

Landw. Vers. Stat. Bd 65 Heft 1/2 p 1-22.

Timothy hay.

Smith L.H. 1910 Plot arrangements for variety experiments with corn.

Proc. Amer. Soc. Agron. V. 1. p 84-9

Lehmann A 1907

Seventh Annual Report of the Agricultural Chemist for the year 1905-6. Department of Agric. Mysore State 53 p. Bangalore paddy.

Stockberger W.W. 1912. A study of individual performance in hops. Ann. Report Amer. Breeders' Assoc. vol 7 18 p 452-7

E.C.C Transvaal.

D Mac Donald: Two cotton uniformity trials (figs. ready in Aug. will be sent then)

H C Dunkser: Cotton (unpublished data) 490 plots (1 row x 7 yds) 1936
data unchange

(8)

S M Gubbels. Pruned yield of trials

A R Saunders: (1) Maize 300 plots (1 row x 20 yds) 120 pl.
(2) 250 " (1 row x 10 plots)
unpublished data

(9) (10) Statistical methods with special reference to field experiments

A H. Mc Kinstry Cotton 520 plots (1 row x 25 feet) 1935
row yield
unpublished

(11) (12)

B. T 5 trials, each of about 160 plots. 1921-3,
size of unit (20 ridges x 7 metres)
about 1/20 acre.
yield grain

200 480

1120
60
1720
200