

# ROTHAMSTED EXPERIMENTAL STATION

(LAWES AGRICULTURAL TRUST)

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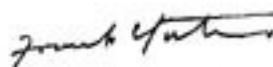
HERTS.

18th February, 1949

Dear Fisher,

I expect you will have heard from Professor Sade, as he appears to be writing round to everyone who has worked in the combinatorial field. I am enclosing a copy of my comments on the paper he sent me (and which I expect he has also sent you). Our number 9408 seems to be becoming generally acceptable, but the utmost confusion seems to reign on the number for  $n = 7$ .

Yours sincerely,



F. Yates

Professor R.A. Fisher

C O P Y

18th February, 1949

Professor Albert Sade,  
14, Bd. du Jardin Zoologique,  
Marseilles.

Dear Professor Sade,

Thank you for your publication on Latin squares. I am interested to see that you have cleared up the discrepancy between ourselves and Jacob. I shall also be very interested to see your enumeration of the  $7 \times 7$  squares. An attempt at this was made by H.W. Norton (1939, Ann.Eugen., 2, 269-307). He arrived at the number 16,927,968 standard squares. He did not claim that his enumeration was necessarily complete, but he did, I think, believe it to be, and I think he would be surprised if the true number was as high as 221,000,000.

Incidentally, I am a little puzzled by M. Frelow's induction formula, since although he gives the correct number of squares of sides 5 and 6 he does not give the correct number for sides 3 and 4. I should consequently doubt its generality.

I take it you have written to Professor Fisher. I myself have been doing no work in this field since the outbreak of the war and am consequently out of touch with people who would be likely to be writing on combinatorial analysis.

Yours sincerely,

F. Yates