Clearly the left hand members of these conditions are now no longer independent of the displacements x_i , and the question of whether the new allele will increase now depends upon the nature of the disturbance which is created among the old alleles by the introduction of the new gene. For instance, if the new gene is introduced into the population at the expense of allele A_1 only, while the frequencies of $A_2, A_3, \dots, A_n$ remain unchanged, then condition (9) reduces to

$$\sum_{j=1}^n (a_{1j} - a_{n+1,j}) p_j < 0$$

and this condition may clearly be interpreted in a very simple fashion.

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CYTOLOGICAL STUDIES IN THE GRAMINEÆ (II)

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This second list of chromosome numbers continues that published earlier by Singh and Godward (1960), which included data utilised by Clayton (1962) in support of the separation of the genera *Tetrapogon* and *Chloris*. It is accordingly numbered table 2 to follow table 1 of the previous paper.

TABLE 2

Name		Chromosome counts		Source
		<i>n</i>	<i>2n</i>	
TRIBE.— <i>PANICEÆ</i>				
<i>x</i> = 9	PANICUM <i>miliaceum</i> L. var. <i>contractum</i> Alef.		36 36	Patna, India Zak. Bot. Ogołney, Poland ¹
TRIBE.— <i>SPOROBOLÆ</i>				
<i>x</i> = 9	SPOROBOLUS <i>africanus</i> (Poir.)	...	36	Royal Botanic Gardens, Kew
TRIBE.— <i>CHLORIDÆ</i>				
<i>x</i> = 10	CHLORIS <i>gayana</i> Kunth	...	20, 20, 40	Kitale, Kenya
TRIBE.— <i>FESTUCEÆ</i>				
<i>x</i> = 7	CATAPODIUM <i>rigidum</i> (L.) C. E. Hubbard	...	14 + 1 to 5	Royal Botanic Gardens, Kew
TRIBE.— <i>BROMEÆ</i>				
<i>x</i> = 7	BROMUS <i>coloratus</i> Steud.	...	42	Royal Botanic Gardens, Kew
<i>x</i> = 7	VULPIA <i>megalura</i> (Nutt.) Rydberg	...	63	Royal Botanic Gardens, Kew
TRIBE.— <i>MELICÆ</i>				
<i>x</i> = 6	MELICA <i>altissima</i> Linn. <i>transsilvanica</i> Schur.		18 18	Royal Botanic Gardens, Kew Royal Botanic Gardens, Kew
TRIBE.— <i>AVENEÆ</i>				
<i>x</i> = 7	TRisetum <i>panicum</i> Pers.	...	14	Royal Botanic Gardens, Kew
<i>x</i> = 7	KÆLERIA <i>alpicola</i> Gren. & Godr. <i>phleoides</i> Pers.		42 + 1B 28	Royal Botanic Gardens, Kew Royal Botanic Gardens, Kew

¹ Seeds received through Chelsea Physic Garden, London.

Name		Chromosome counts		Source
		<i>n</i>	<i>2n</i>	
TRIBE.— <i>HORDEÆ</i>				
<i>x</i> = 7	ELYMUS			
	<i>interruptus</i> Buckl.	...	28	Royal Botanic Gardens, Kew
	<i>virginicus</i> Linn.	...	28	Royal Botanic Gardens, Kew
<i>x</i> = 7	AGROPYRON			
	<i>caninum</i> (L.) Beauv. P.	...	28	Royal Botanic Gardens, Kew
	<i>strigosum</i> Boiss.	...	28	Royal Botanic Gardens, Kew
TRIBE.— <i>DANTHONIEÆ</i>				
<i>x</i> = 6	DANTHONIA			
	<i>flavescens</i> Hook.	...	12	Royal Botanic Gardens, Kew

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MUTUAL REDUCTION OF DOMINANCE INVOLVING THREE LOCI IN *MUS MUSCULUS*

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When the heterozygote becomes phenotypically distinct from the dominant homozygote due to the presence of a mutant gene at a second locus, reduction of the dominance of the first gene can be said to have taken place. This phenomenon was first noticed in mice in 1911 by Durham, who observed that *BB* became distinct from *Bb* when on a pink-eye (*pp*) background, and again in 1931 by Snell. However, it was not until 1953 that Wallace showed this reduction to be mutual, *PP* and *Pp* being distinguishable from each other when on a *bb* background, thus giving rise to six distinct phenotypes instead of the expected four (table 1).

Goodwins (1958) further showed that on a dilute (*dd*) background the