

## Re: frequency of crossovers at meiosis

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<pslant@xxxxxxxx> wrote in message [news:fpfa4m\\$2e5n\\$1@xxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:fpfa4m$2e5n$1@xxxxxxxxxxxxxxxxxxxxxxxx)

I read that mendels second law (saying that traits are inherited independently) if either

- 1) the genes regultating the traits reside on different chromosomes
- 2) the genes are far from each other on the same chromosome

Can this really be true for 2) ?

If even nr of crossovers (including 0) is as common as odd, the traits are more likely to follow each other than if the genes are at separate chromosomes.

Am I thinking about this wrong ?

I can't tell. Genes on different chromosomes have a linkage (% recombination) of exactly 0.5. Pairs of genes on the same chromosome have a linkage which approaches 0.5 asymptotically as the distance between the genes on the chromosome increases.

So if you were pointing out that 'asymptotically approaches' is not quite the same thing as 'exactly equals' then you are thinking right (but a bit too pedantically, IMHO). Otherwise, you may be thinking wrong.

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