

GENETICS

WHY DOG AND CAT CAN'T MARRY

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or in more scientific terms: Why are F1 hybrids so often sterile or lethal?

The Dobzhansky-Muller theory says that there is an incompatibility between genes with reduced fitness that have diverged between species. So far nobody has ever observed a D-M gene but a new [Science](#) paper describes two genes that separate *D. simulans* and *D. melanogaster*: *lhr* (lethal hybrid rescue) and *hmr* (hybrid male rescue).

Well, dogs have 78 chromosomes, arranged in 39 pairs, while cats have 38 chromosomes, in 19 pairs – so no viable embryo can be produced.

Yea, Yea.

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