

Congenital strain



Congenetic strains are strains in which part of the genome of one inbred strain (strain A) is purposefully inserted into the genetic background of another inbred strain (strain B). Since even the congenic strain is inbred, i.e. homozygous throughout the entire genome, the only genetic difference between strain B and congenic strain BA# (where # is a specific chromosome number) is precisely the so-called differential segment of chromosome#. If strains B and BA# differ in some phenotypic characteristic (weight, glycemia, or sensitivity to teratogen), it is possible to conclude that the gene is in the differential segment or genes involved in the genetic determination of the measured trait. Consomic and conplastic strains are special cases of congenic strains.

Links

Source

- ŠEDA, O. – LIŠKA, F. – ŠEDOVÁ, O.. *Current Genetics* [online]. ©2005. [cit. 17-03-2023]. <<http://biol.lf1.cuni.cz/ucebnice/>>.

