



346 Research paper

Genome editing for disease resistance in pigs and chickens

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In Significant Impact Groups:

Breeding for disease resistance or robustness \

Species targeted: Pigs;Poultry;

Age: Not stated;

Summary:

Targeted breeding is common practice, with measurable production traits such as feed conversion in cattle or wool production in sheep. In the late 20th century, genomic selection was added to the livestock breeding tool box achieving faster improvement in livestock production efficiency. Genome editing offers new opportunities to livestock breeding for disease resistance, allowing the direct translation of laboratory research into disease-resistant or resilient animals.

Shown progress in genome editing so far in pigs and chicken are discussed (PRRS, PEDV, ASFV and ALV, avian influenza virus).

The two major hurdles still to be faced prior to implementation of this promising technology are consumer acceptance and the regulatory framework.

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Where to find the original material:

<https://academic.oup.com/af/article/9/3/6/5522878>; <https://doi.org/10.1093/af/vfz013>

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