

Pecked because of plumage colour

Behavioural differences between two PMEL17 genotypes



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Introduction

A mutation in the PMEL17 gene have shown to protects against damage caused by feather pecking.

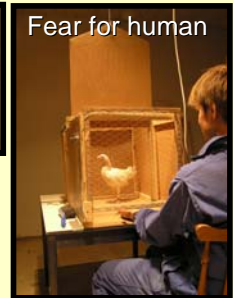
Black birds with functional PMEL17 genes had worse plumage condition than **white birds** with non-functional genes.

This study tries to: 1) confirm this relationship; 2) investigate the mechanism behind it.



Behavioural tests

A series of behavioural test were conducted to investigate differences between two PMEL17 genotypes.



Box observation

20 groups, 3 birds in each, divided by:

- Gender
- Genotype composition

Real-time observation of feather pecking behaviours.

Conclusion

Observations confirm: a mutation in PMEL17 protects against feather pecking.

First evidence that a behavioural mechanism is causing this .

Much speaks for a genetic origin.

No preference

Immobile **black** feathers did not attract more pecking than **white**.

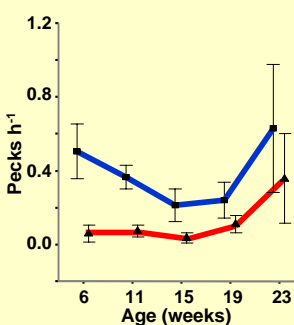
Suggests that mobility is important.



Black victimization

Black birds were more severely pecked than **white birds**.

Most significant at early age



Behavioral differences

Black birds vocalized more in an Open-field arena.

White birds were more active at puberty in a Fear for human test.

