Chestnut Factor 1

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Early in the year 2000, the FPS board met with Mr. Van Haeringen, director of the Van Haeringen Laboratory in Wageningen. One of the topics discussed was the research into the presence of the chestnut factor among FPS studbook stallions. By means of advanced equipment, it is now possible to determine whether the stallion carries the chestnut factor by testing recent or existing genetic material such as blood or hair roots. Due to the limited but regular frequency with which chestnut-colored foals are born, the executive committee is acquainted with the fact that certain stallions carry the chestnut factor. Research has now confirmed the presence of the chestnut factor among these stallions. To prevent further distribution of this color gene among the population, the executive committee has decided to test all studbook stallions for the presence of the chestnut factor. This study is limited not only to the current studbook stallions but also any living stallions who have been removed from stud service and any stallions who have since died but for whom suitable genetic material exists that could be used for such testing in the laboratory.

The names of stallions in which the chestnut gene has been confirmed are: Freark 218, Ijsbrand 238, Laes 278, Diedert 288, Jillis 301, Wicher 334, Atse 342, Abe 346. This implies that according to the following diagram, all descendants of these stallions have a 50% CHANCE of carrying the chestnut factor.

Z=a non-carrier of the chestnut gene
z=a carrier of the chestnut gene

Diagram I

Sire/dam	Z	Z
Z	ZZ	ZZ
z	Zz	Zz

Diagram II

Sire/dam	Z	z
Z	ZZ	Zz
z	Zz	zz

Diagram I
Breeding a carrier of the chestnut gene (**Z**z) with a non-carrier of the chestnut gene (**ZZ**) will lead to descendants with a 50% chance of carrying the chestnut gene.

Diagram II
Breeding a carrier of the chestnut gene (**Z**z) with another carrier of the chestnut gene (**Z**z) will lead to descendants with a 50% chance of carrying the chestnut gene, a 25% chance of a chestnut foal and a 25% chance of being a non-carrier of the chestnut gene.

-Only foals that inherit a "z" from both parents (making them zz) will actually be chestnut. Both the sire and the dam must be chestnut carriers in order for the chance to exist that a chestnut foal is actually born.