



TABLE 1: Assessment of the probability of ASFV transmission from feed material to domestic pigs through protective seed coverings mechanisms, feed processing and storage conditions using risk factors

Feed material	Protective seed coverings	Processing	Storage conditions	ASFV transmission risk factor	Probability of ASFV transmission
Forages and roughages					
forages (alfalfa, clover, grass, green corn)	No (3)	–/D (3/1)	Few, days, OT (3)	2	cannot be excluded
roughages (hay, straw)	No (3)	D (1)	Several month, OT/RT (1)	1	Unlikely ¹
silage	No (3)	S (2)	At least 90 days; OT (1)	2	Cannot be excluded*
Grain and grain by-products					
grains	Partly (2)	D/CP/S (1)	RT (1)	1	Unlikely ³
corn	Yes (1)	D (1)	RT ² (1)	1	Unlikely
Corn cob meal	Partly (2)	S (2)	RT (1)	1,5	Unlikely
DDGS	Partly (2)	H & D (1+)	RT (1)	1	(Very) Unlikely
expeller, extraction meals	Yes (1)	H & CP (1+)	RT (1)	1	(Very) Unlikely ⁴
Tubers und roots					
fodder beet	No (3)	S (2)	Several month, 4°C, 90% AH (3)	3	Likely
sugar beet pulp	No (3)	H (1+)	RT (2)	1	Unlikely
potatoes	No (3)	H & S ² (1)	RT (1)	1,5	Unlikely
Others					
grain legumes (peas, horse beans, lupines)	Yes (1)	H (1)	RT (2)	1	Unlikely
blood and plasma products	n/a (2)	H & CP (1)	4°C (2) RT (1) ⁵	2	Cannot be excluded
compound feed	Partly ⁵ (2)	H (1)	Several weeks, RT (1)	1	Unlikely

–: none; D: drying; S: ensiling; CP: chemical preservation; C: cooling; H: heat; n/a: not applicable; RT: room temperature (ca. 18–20 °C[†]); OT: outdoor temperature (7.4–10.5°C[†]); AH: air humidity

¹ A transmission is very unlikely if the feed has been stored secured from wild boar for more than six months

² Sealed airtight

³ A transmission is very unlikely if grains with at least 86% dry matter was stored on a cool and dry place for at least 24 hours before feeding (Fischer et al. 2020)

⁴ In the case of feed materials that have been stored at temperatures of 12–15°C during transport, transmission is very unlikely

⁵ mechanical protection same as raw material (e.g. corn, grain)

* no data available

[†] <https://de.statista.com/statistik/daten/studie/914891/umfrage/durchschnittstemperatur-in-deutschland/>

[‡] Kersten et al. 2010

[§] Fischer et al. 2021