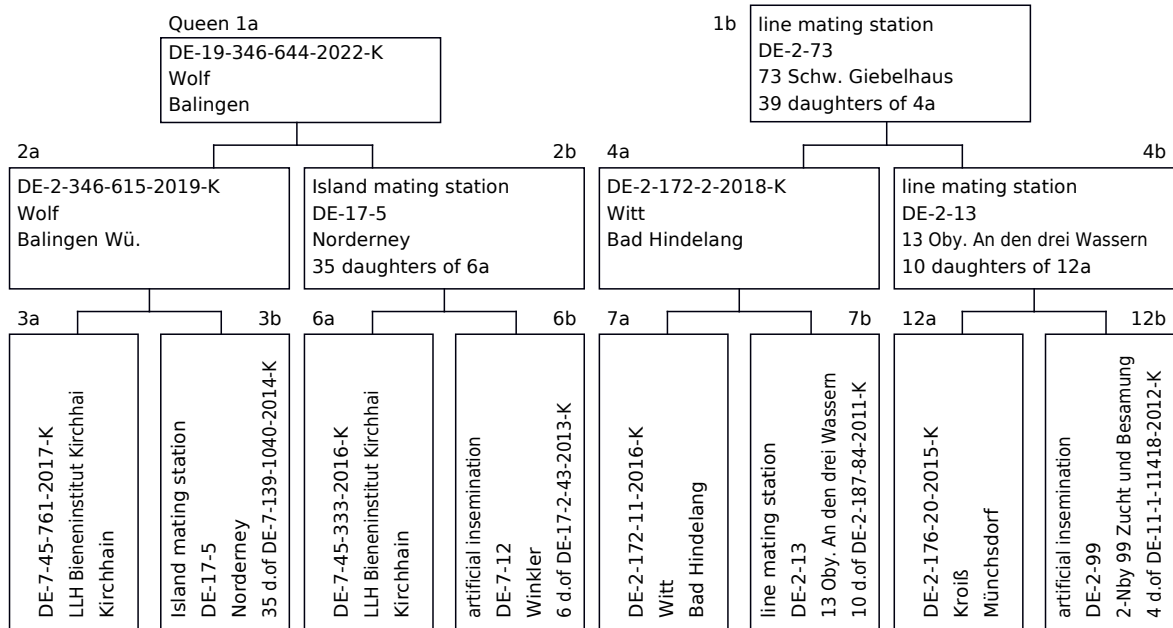


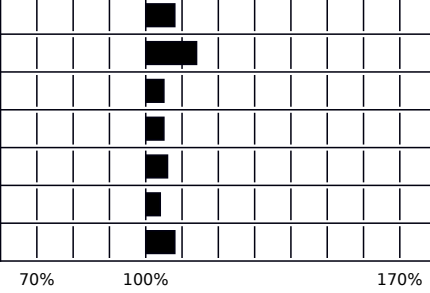
Tester of the queen: Wolf, Christian, 72336 Balingen, DE-19-346, Apiary 2
 Breeder of the queen: Wolf, Christian, 72336 Balingen, DE-19-346
1a Studbook number: **DE-19-346-644-2022-K**

Race line: Sign: yellow 56
 Generation: Hatch date: Daughters of Queen: 7.2%
 Workers: 0.9%

A. Pedigree



B. Own performance

Performance test year	No. of the colony 44			comparable colonies at the apiary		
	kg	%	Ranking	number	Yield average kg	
	74.3	109.8	7	12	67.7	
	Assessment*	Breeding values			Reliability	
Total breeding value¹	-	108				
Honey yield	-	114				0.45
Defensive behavior	3.50	105				0.55
Steadiness on comb	3.50	105				0.55
Swarming drive	4	106				0.5
Varroa	-	104*				0.51
Performance index	-	108				0.45
Robustness in winter	4					
Development in Spring	4					
Colony strength	4					

¹In accordance with the resolution of the breeder convention of 9th April 2011, for the total breeding value, Varroa tolerance is weighted by 40% and honey yield, gentleness, calmness during inspection, and swarming tendency are each weighted by 15%.

Only one Varroa trait was recorded

C. Performance of the sisters

See page 2

D. Body features, see appendix

See attached characteristic documents:

E. Results

Class Av

Selected for Varroa tolerance. Suitable for breeding with no restrictions; suitable for use as a 4a colony at frequently visited mating stations.

Breeding selection report DE-19-346-644-2022-K

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Performance of the sisters

Amount of checked sisters: 26

Studbook number	Tester of the queen	Apiary	Total breeding value	Yield kg	Breeding Value Honey	Defensive behavior	Breeding Value Defensive	Calmness during inspection	Breeding Value Calmness	Swarming drive	Breeding Value Swarming	Varroa-index	Performance index
DE-19-346-157-2022	DE-2-192	1	107		115		Behavior		104		105	(102)	108
DE-19-346-158-2022	DE-2-192	1	107		112		105		104		105	(102)	108
DE-19-346-160-2022	DE-2-192	1	108		116		104		104		105	(102)	109
DE-19-346-161-2022	DE-2-192	1	106		111		102		102		104	(102)	106
DE-19-346-137-2022	DE-2-313	2	109		112		108		107		107	104	110
DE-19-346-116-2022-K	DE-2-502	2	110		115		110		109		105	103	111
DE-19-346-117-2022-K	DE-2-502	2	100		112		97		97		102	96	102
DE-19-346-118-2022**	DE-2-502	2	106		(112)		(103)		(103)		(102)	(102)	106
DE-19-346-119-2022-K	DE-2-502	2	108		111		99		100		103	109	104
DE-19-346-120-2022**	DE-2-502	2	106		(112)		(103)		(103)		(102)	(102)	106
DE-19-346-121-2022	DE-2-502	2	106		114		107		107		104	98*	110
DE-19-346-110-2022-K	DE-2-503	2	108		114		108		105		111	101	111
DE-19-346-111-2022-K	DE-2-503	2	105		112		108		111		92	99	107
DE-19-346-112-2022-K	DE-2-503	2	107		111		104		105		104	103	107
DE-19-346-113-2022	DE-2-503	2	103		112		100		98		89	104	100
DE-19-346-114-2022	DE-2-503	2	102		112		96		98		89	103	99
DE-19-346-115-2022	DE-2-503	2	102		112		95		94		95	103	99
DE-19-346-138-2022-K	DE-7-322	1	107		113		101		102		102	105	106
DE-19-346-607-2022	DE-19-346	1	111	41.5	118	3.5	108	3.5	109	4	107	104	112
DE-19-346-618-2022	DE-19-346	2	113	107.7	117	3.8	109	4	110	4	107	107	113
DE-19-346-623-2022	DE-19-346	2	109	99	116	3.5	104	3.5	104	4	106	104	109
DE-19-346-644-2022-K	DE-19-346	2	108	74.3	114	3.5	105	3.5	105	4	106	104*	108
DE-19-346-676-2022	DE-19-346	2	109	77.4	114	3.5	105	3.5	105	4	106	104	109
DE-19-346-632-2022	DE-19-346	3	103	36.4	112	3	100	2.8	101	4	102	98	104
DE-19-346-635-2022	DE-19-346	3	107	35	112	3.3	104	3	104	4	103	103	107
DE-19-346-650-2022	DE-19-346	3	107	36.3	113	3	101	3	102	4	102	106	106

Only one Varroa trait was recorded

Colony without performance tests