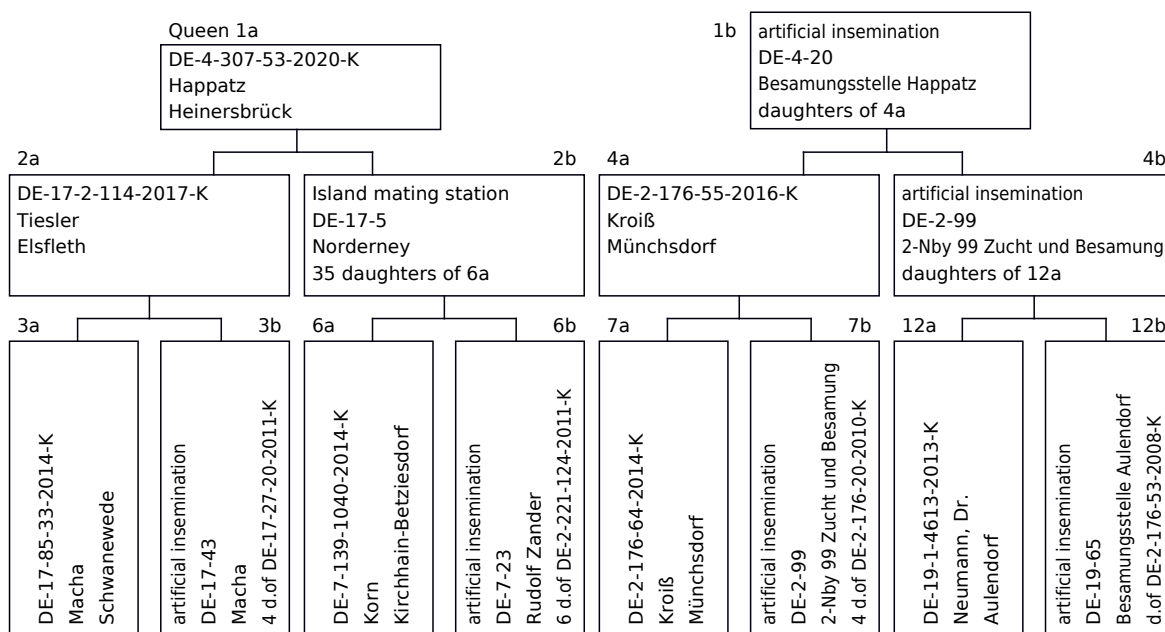


Tester of the queen: Happatz, Maik, 03185 Heinersbrück, DE-4-307, Apiary 1
 Breeder of the queen: Happatz, Maik, 03185 Heinersbrück, DE-4-307
1a Studbook number: **DE-4-307-53-2020-K**

Race line: Sign: blue 53
 Generation: Hatch date: Daughters of Queen: 1.4%
 Workers: 0.6%

A. Pedigree



B. Own performance

Performance test year	No. of the colony 5			comparable colonies at the apiary	
	kg	%	Ranking	number	Yield average kg
	49	126	1	34	38.9
	Assessment*	Breeding values			Reliability
Total breeding value¹	-	120			
Honey yield	-	121			0.47
Defensive behavior	3.80	116			0.56
Steadiness on comb	3.80	117			0.55
Swarming drive	3.80	111			0.51
Varroa	-	115			0.5
Performance index	-	119			0.47
Robustness in winter	3.90		70%	100%	170%
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%.

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-4-307-53-2020-K

Page 2

Performance of the sisters

Amount of checked sisters: 6

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 ndex
DE-4-307-53-2020-K	DE-4-307	1	120	49	121	3.8	116	3.8	117	3.8	111	115	119
DE-4-307-54-2020	DE-4-307	1	118	43	119	3.6	115	3.6	116	3	102	115	115
DE-4-307-55-2020	DE-4-307	1	106	38	110	3	99	3.1	100	2.5	92	111	100
DE-4-307-56-2020	DE-4-307	1	111	42	116	3.5	108	3.1	106	3.6	109	106	111
DE-4-307-57-2020	DE-4-307	1	116	44	118	3.6	113	3.4	112	3.5	108	112	115
DE-4-307-58-2020	DE-4-307	1	119	46	119	3.9	116	3.5	115	3.8	110	115	117