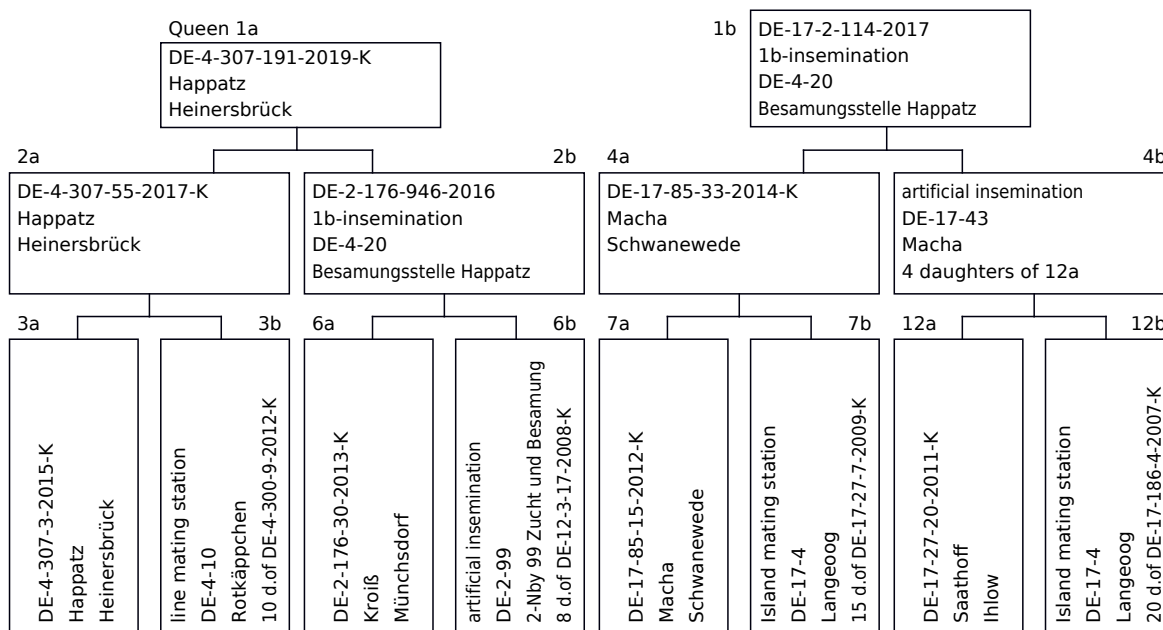


Tester of the queen: Happatz, Maik, 03185 Heinersbrück, DE-4-307, Apiary 2
 Breeder of the queen: Happatz, Maik, 03185 Heinersbrück, DE-4-307
1a Studbook number: **DE-4-307-191-2019-K**

Race line: -33 Sign: green 91 Daughters of Queen: 0.3%
 Generation: Hatch date: Workers: 1.5%

A. Pedigree



B. Own performance

Performance test year	No. of the colony			comparable colonies at the apiary	
	kg	%	Ranking	number	Yield average kg
	54.1	109	6	30	49.6
	Assessment*	Breeding values			Reliability
Total breeding value¹	-	124			
Honey yield	-	126			0.5
Defensive behavior	4	122			0.62
Steadiness on comb	3.70	119			0.62
Swarming drive	4	117			0.5
Varroa	-	115			0.55
Performance index	-	124			0.5
Robustness in winter	4		70%	100%	170%
Development in Spring	3.80				
Colony strength	3.80				

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-4-307-191-2019-K

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Performance of the sisters

Amount of checked sisters: 4

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-4-307-191-2019-K	DE-4-307	2	124	54.1	126	4	122	3.7	119	4	117	115	124
DE-4-307-192-2019	DE-4-307	2	123	54.7	126	3.5	119	3.7	117	4	117	115	123
DE-4-307-193-2019	DE-4-307	2	123	54.7	126	3.8	120	3.5	116	4	117	115	123
DE-4-307-341-2019	DE-4-307	7	129	4	131	3.5	130	3.6	129	3.5	115	116	131