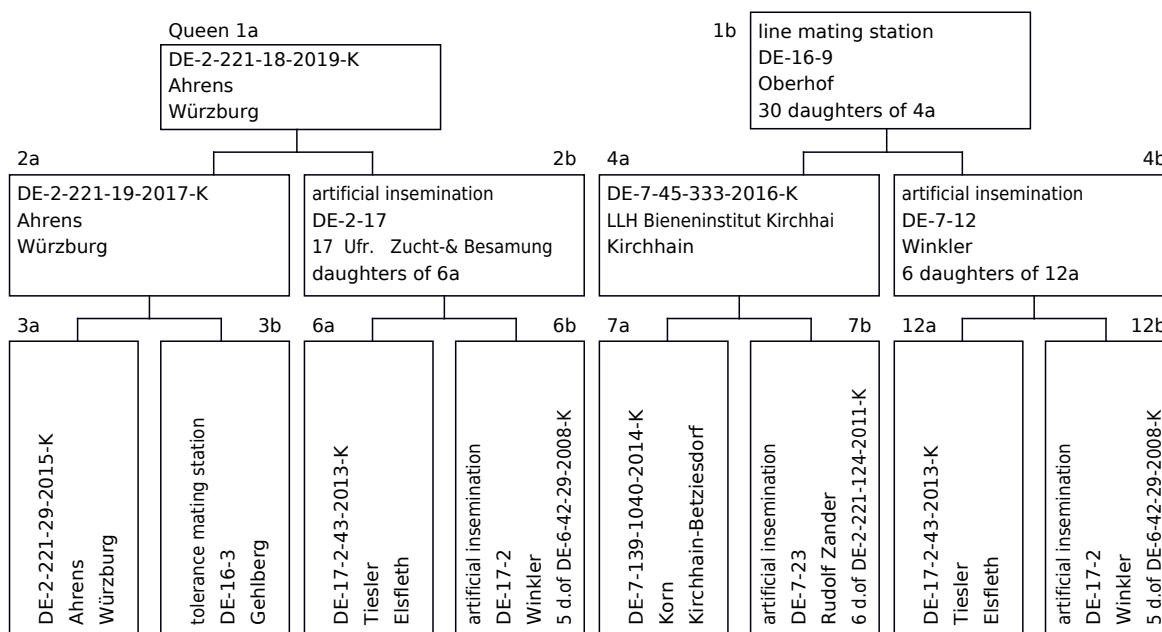


Tester of the queen: Ahrens, Dirk, 97074 Würzburg, DE-2-221, Apiary 1
 Breeder of the queen: Ahrens, Dirk, 97074 Würzburg, DE-2-221
1a Studbook number: **DE-2-221-18-2019-K**

Race line: -70 Sign: green 8 Daughters of Queen: 1.3%
 Generation: 10 Hatch date: 04.06.2019 Workers: 7.0%

A. Pedigree



B. Own performance

Performance test year	No. of the colony 102			comparable colonies at the apiary	
	kg	%	Ranking	number	Yield average kg
	59.8	115.4	2	16	51.8
	Assessment*	Breeding values			Reliability
Total breeding value¹	-	115			
Honey yield	-	112			0.53
Defensive behavior	3.80	121			0.6
Steadiness on comb	3.70	116			0.6
Swarming drive	4	111			0.53
Varroa	-	107			0.57
Performance index	-	117			0.53
Robustness in winter	3.50		70%	100%	170%
Development in Spring	3				
Colony strength	3.50				

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-2-221-18-2019-K

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Performance of the sisters

Amount of checked sisters: 8

Studbook number	Tester of the queen	Apiary	Total breeding value	Yield kg	Breeding Value Honey	Defensive behavior	Breeding Value Defensive Behavior	Calmness during inspection	Breeding Value Calmness	Swarming drive	Breeding Value Swarming	Varroa-index	Performance ndex
DE-2-221-38-2019	DE-1-143	1	111		108		Behavior		during		drive	102	114
DE-2-221-40-2019-K	DE-1-143	1	115		111		116		inspection		112	110	114
DE-2-221-15-2019-K	DE-2-221	1	115	52.2	110	3.8	120	3.6	115	4	111	107	116
DE-2-221-18-2019-K	DE-2-221	1	115	59.8	112	3.8	121	3.7	116	4	111	107	117
DE-2-221-24-2019	DE-2-221	1	112	44.6	107	2.9	110	3	106	4	111	110	110
DE-2-221-27-2019	DE-2-221	1	111	54.1	108	3.1	110	2.6	103	4	110	109	109
DE-2-221-31-2019	DE-2-221	1	110	53.8	110	3.6	119	3.7	115	1	96	103	112
DE-2-221-33-2019-K	DE-2-221	1	114	83.8	118	3.1	113	3.4	110	4	111	107	115