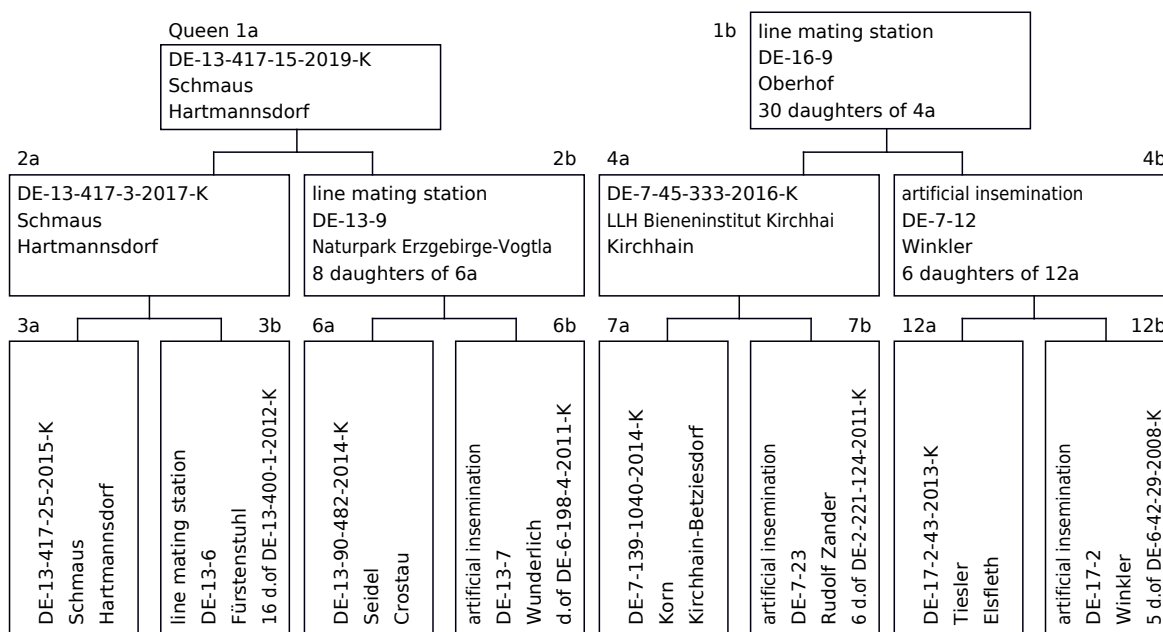


Tester of the queen: Schmaus, Armin, 09232 Hartmannsdorf, DE-13-417, Apiary 1
Breeder of the queen: Schmaus, Armin, 09232 Hartmannsdorf, DE-13-417
1a Studbook number: **DE-13-417-15-2019-K**

Race line: Sign: green 15 Daughters of Queen: 0.2%
Generation: 4 Hatch date: 22.06.2019 Workers: 1.4%

A. Pedigree



B. Own performance

Performance test year	No. of the colony S 02			comparable colonies at the apiary	
	kg	%	Ranking	number	Yield average kg
	28.5	79.8	2	3	35.7
	Assessment*	Breeding values			Reliability
Total breeding value¹	-	108			
Honey yield	-	111			0.38
Defensive behavior	4	114			0.45
Steadiness on comb	4	110			0.45
Swarming drive	4	111			0.34
Varroa	-	97*			0.35
Performance index	-	113			0.38
Robustness in winter			70%	100%	170%
Development in Spring	3				
Colony strength	3				

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 A

Suitable for breeding with no restrictions; suitable for use as a 4a colony at frequently visited mating stations (all customary breeding values over 100).

Breeding selection report DE-13-417-15-2019-K

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Performance of the sisters

Amount of checked sisters: 12

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-13-417-6-2019**	DE-13-417	1	108		(111)		Behavior		queen		(drive)	(97)	112
DE-13-417-13-2019	DE-13-417	1	108	51.2	112	4	113	4	inspection 110	4	112	97*	114
DE-13-417-14-2019	DE-13-417	1	106	27.5	110	3.5	108	3.8	106	4	111	97*	110
DE-13-417-15-2019-K	DE-13-417	1	108	28.5	111	4	114	4	110	4	111	97*	113
DE-13-417-17-2019	DE-13-417	1	108		(111)		(112)		(109)		(111)	(97)	112
DE-13-417-18-2019**	DE-13-417	1	108		(111)		(112)		(109)		(111)	(97)	112
DE-13-417-8-2019	DE-13-417	2	109	54	112	4	112	4	109	4	112	99*	113
DE-13-417-9-2019	DE-13-417	2	105	37.6	108	4	111	3.8	107	4	110	94*	111
DE-13-417-12-2019	DE-13-417	2	110	60	114	4	112	4	109	4	112	101*	113
DE-13-417-19-2019	DE-13-417	2	103	35.5	109	4	112	4	109	4	111	89*	112
DE-13-417-21-2019	DE-13-417	2	108	31.5	108	3.8	110	4	108	4	111	101*	111
DE-13-417-31-2019	DE-13-417	2	108	52.3	112	4	112	4	109	4	111	98*	113

Only one Varroa trait was recorded

Colony without performance tests