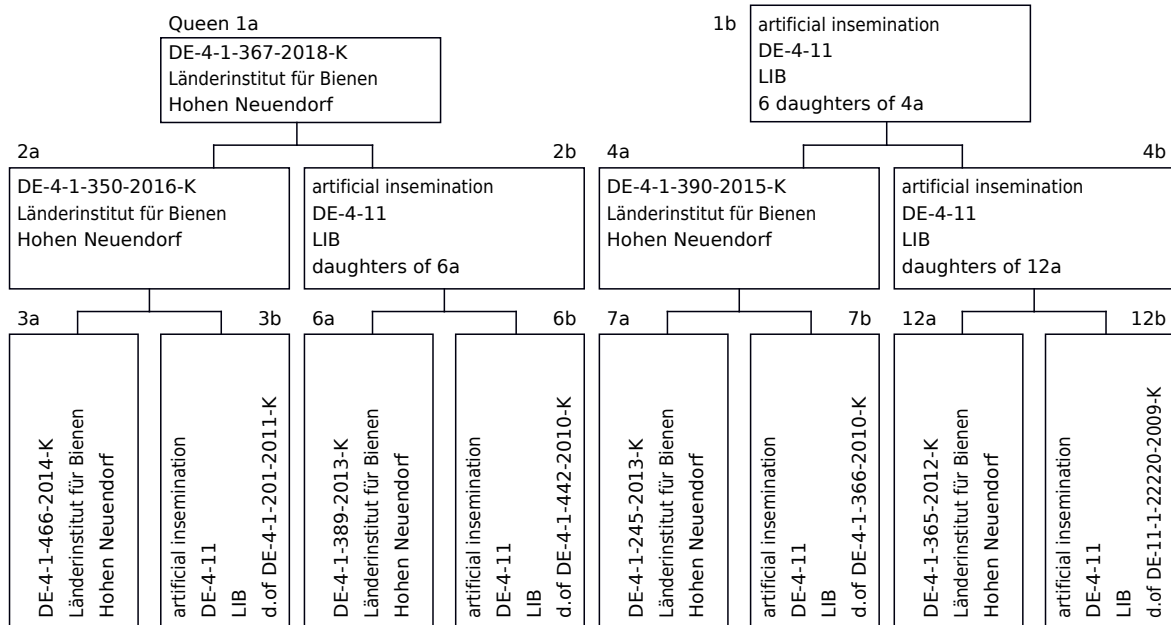


Tester of the queen: Länderinstitut für Bienenkunde, 16540 Hohen Neuendorf, DE-4-1, Apiary 1
 Breeder of the queen: Länderinstitut für Bienenkunde, 16540 Hohen Neuendorf, DE-4-1
1a Studbook number: **DE-4-1-367-2018-K**

Race line: -33 Sign: red 67 Daughters of Queen: 7.4%
 Generation: Hatch date: 11.06.2018 Workers: 9.6%

A. Pedigree



B. Own performance

Performance test year	No. of the colony 130			comparable colonies at the apiary		
	kg	%	Ranking	number	Yield average kg	
	37.4	131.2	3	30	28.5	
	Assessment*	Breeding values			Reliability	
Total breeding value¹	-	108	■			
Honey yield	-	100	■			0.49
Defensive behavior	3.50	110	■			0.61
Steadiness on comb	3.40	112	■			0.61
Swarming drive	4	109	■			0.4
Varroa	-	101	■			0.3
Performance index	-	106	■			0.56
Robustness in winter	3	70% 100% 170%				
Development in Spring	3.20					
Colony strength	3.10					

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-4-1-367-2018-K

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Performance of the sisters

Amount of checked sisters: 22

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 index
DE-4-1-362-2018	DE-4-1	1	103	33	97	3.4	103	3.1	109	4	109	95	103
DE-4-1-364-2018	DE-4-1	1	108	31	96	3.4	110	3.4	111	4	108	104	104
DE-4-1-365-2018	DE-4-1	1	106	28.3	95	3.2	107	3.2	109	4	108	102	102
DE-4-1-366-2018	DE-4-1	1	102	23.9	92	3.1	105	3	107	4	107	96	100
DE-4-1-367-2018-K	DE-4-1	1	108	37.4	100	3.5	110	3.4	112	4	109	101	106
DE-4-1-371-2018	DE-4-1	1	100	31.6	95	3	103	2.8	104	4	107	94	100
DE-4-1-377-2018	DE-4-1	1	103	34.9	98	3.2	106	3.1	108	4	108	96	103
DE-4-1-369-2018	DE-4-1	2	103	27	94	3.4	107	3.2	108	4	107	97	101
DE-4-1-370-2018	DE-4-1	2	104	22.7	93	3.2	105	3.2	107	4	107	100	100
DE-4-1-372-2018	DE-4-1	2	102	31.8	94	3.3	103	2.7	103	4	106	99	99
DE-4-1-373-2018	DE-4-1	2	103	26.1	93	3.1	103	2.9	104	4	106	100	99
DE-4-1-374-2018	DE-4-1	2	103	21.4	92	3.2	105	3.1	106	4	107	100	100
DE-4-1-382-2018	DE-4-1	2	103	30.9	95	3.4	107	3.3	109	4	108	97	102
DE-4-1-383-2018	DE-4-1	2	103	27.6	93	3	101	2.8	103	4	106	102	98
DE-4-1-360-2018	DE-4-1	3	99	27.3	90	3.1	102	3	103	4	106	94	97
DE-4-1-361-2018	DE-4-1	3	105	35.6	93	3.3	106	3.4	108	4	107	101	101
DE-4-1-363-2018	DE-4-1	3	99	34.2	92	3	102	3.1	104	4	106	94	98
DE-4-1-376-2018	DE-4-1	3	102	23.3	90	3.5	107	3.4	109	4	107	96	101
DE-4-1-380-2018	DE-4-1	3	103	38.4	93	3.5	106	3.1	106	4	107	100	100
DE-4-1-381-2018	DE-4-1	3	101	35.7	92	3.3	103	2.9	103	4	106	97	98
DE-4-1-384-2018	DE-4-1	3	102	46.7	94	3.5	104	2.8	103	4	106	98	99
DE-18-39-1840-2018-K	DE-18-39	1	103		92		105		107		107	(98)	101