

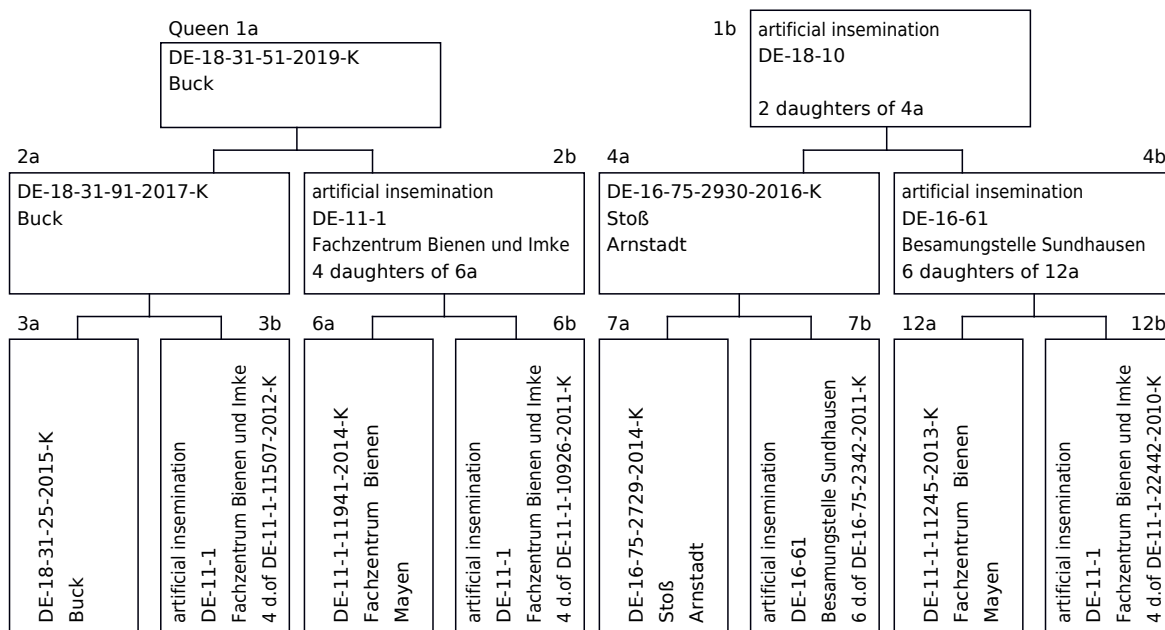
Tester of the queen: Buck, Christoph, DE-18-31, Apiary 3
Breeder of the queen: Buck, Christoph, DE-18-31
1a Studbook number: **DE-18-31-51-2019-K**

Race line:
Generation: 4

Sign: green 64
Hatch date: 07.06.2019

Daughters of
Queen: 5.2%
Workers: 4.7%

A. Pedigree



B. Own performance

Performance test year	No. of the colony 18-31/B12			comparable colonies at the apiary	
	kg	%	Ranking	number	Yield average kg
	14.4	105.6	8	13	13.6
	Assessment*	Breeding values			Reliability
Total breeding value¹	-	126			
Honey yield	-	117			0.42
Defensive behavior	3.90	129			0.49
Steadiness on comb	4	125			0.49
Swarming drive	3.60	111			0.41
Varroa	-	120			0.45
Performance index	-	124			0.42
Robustness in winter	3.40		70%	100%	170%
Development in Spring	3.40				
Colony strength	3.30				

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-18-31-51-2019-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 during inspection	Swarming drive	Breeding Value Swarming	Varroa-index	Performance index
DE-18-31-64-2019	DE-7-173	1	123		117		117		117		117	118	121
DE-18-31-68-2019-K	DE-7-173	1	125		119		119		119		113	119	123
DE-18-31-70-2019	DE-11-1	2	120		114		114		121		111	112	121
DE-18-31-77-2019	DE-11-1	2	121		114		114		123		112	112	122
DE-18-31-90-2019	DE-11-1	2	123		117		117		121		(112)	117	121
DE-18-31-16-2019-K	DE-18-31	2	126	25.2	120	3.7	125	3.8	121	3.9	112	120	123
DE-18-31-19-2019	DE-18-31	2	124	18.9	115	3.8	127	3.9	122	3.5	110	119	122
DE-18-31-21-2019	DE-18-31	2	126	23.8	120	4	129	4	124	4	113	119	125
DE-18-31-23-2019	DE-18-31	2	122	13	109	3.6	124	3.7	120	4	113	117	119
DE-18-31-24-2019	DE-18-31	2	121	21.1	117	4	129	4	124	3.9	113	110	124
DE-18-31-30-2019	DE-18-31	2	122	19.3	115	3.4	122	3.7	119	4	113	117	120
DE-18-31-46-2019	DE-18-31	2	124	24	119	3.7	125	3.8	121	3.8	112	118	122
DE-18-31-48-2019	DE-18-31	2	124	19.8	115	3.6	123	3.6	119	3.9	112	121	120
DE-18-31-58-2019	DE-18-31	2	123	19.4	115	3.9	127	3.9	123	3	108	116	121
DE-18-31-47-2019	DE-18-31	3	122	15	116	3.7	124	3.4	119	3.9	112	117	121
DE-18-31-49-2019	DE-18-31	3	126	19.3	120	4	129	3.9	125	3.9	113	118	125
DE-18-31-50-2019	DE-18-31	3	124	16.2	118	3.9	129	3.9	124	3.7	112	117	124
DE-18-31-51-2019-K	DE-18-31	3	126	14.4	117	3.9	129	4	125	3.6	111	120	124
DE-18-31-52-2019-K	DE-18-31	3	125	17.8	119	3.9	128	3.8	123	4	113	118	124
DE-18-31-55-2019-K	DE-18-31	3	127	21.3	121	4	130	4	126	4	113	119	126
DE-18-31-56-2019	DE-18-31	3	125	15.5	117	3.6	125	3.6	120	3.9	112	120	121
DE-18-31-74-2019	DE-18-31	3	123	9.9	114	3.8	127	3.7	122	3.8	112	117	122