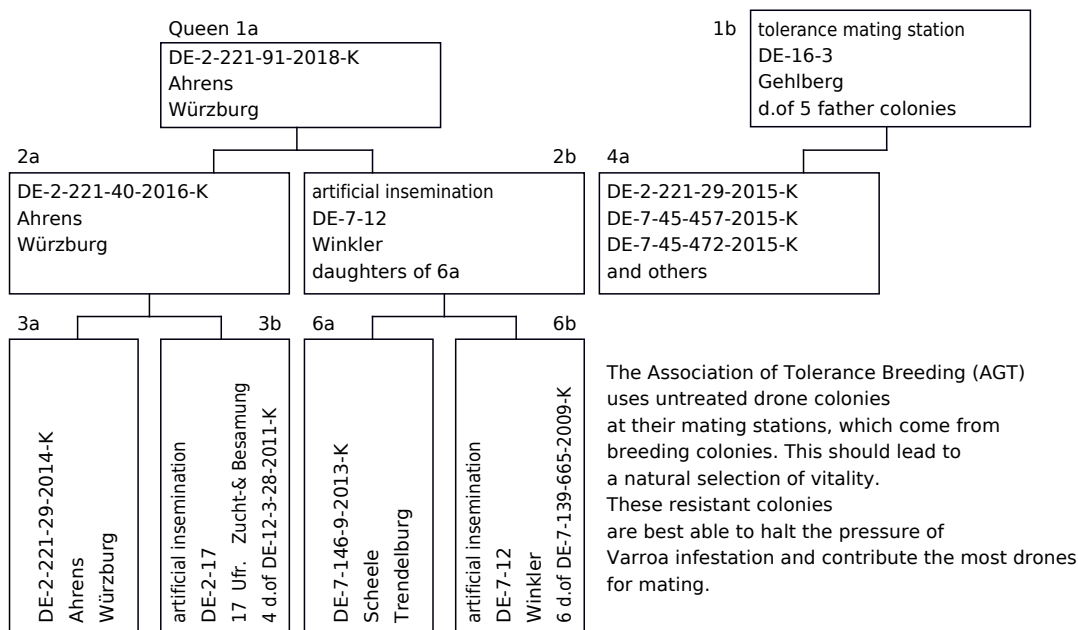


Tester of the queen: Ahrens, Dirk, 97074 Würzburg, DE-2-221, Apiary 1
 Breeder of the queen: Ahrens, Dirk, 97074 Würzburg, DE-2-221
1a Studbook number: **DE-2-221-91-2018-K**

Race line: -70 Sign: red 37 Daughters of Queen: 1.1%
 Generation: 3 Hatch date: 23.06.2018 Workers: 2.8%

A. Pedigree



B. Own performance

Performance test year	No. of the colony 54			comparable colonies at the apiary		
	kg	%	Ranking	number	Yield average kg	
	41.9	121.3	1	17	34.5	
	Assessment*	Breeding values			Reliability	
Total breeding value¹	-	114	■			
Honey yield	-	110	■			0.37
Defensive behavior	3	107	■			0.51
Steadiness on comb	3.20	104	■			0.51
Swarming drive	3	101	■			0.38
Varroa	-	116	■			0.27
Performance index	-	105	■			0.43
Robustness in winter	3	70% 100% 170%				
Development in Spring	3.50					
Colony strength	4					

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-2-221-91-2018-K

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Performance of the sisters

Amount of checked sisters: 7

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-2-221-94-2018	DE-2-176	4	114		102		102		102		102	122	101
DE-2-221-87-2018	DE-2-221	1	115	27.1	102	3.3	109	3.1	105	2.5	98	121	103
DE-2-221-89-2018**	DE-2-221	1	118		(107)		(111)		(108)		(104)	(121)	108
DE-2-221-90-2018	DE-2-221	1	119	37.3	108	3.1	109	3.5	108	4	106	124	108
DE-2-221-91-2018-K	DE-2-221	1	114	41.9	110	3	107	3.2	104	3	101	116	105
DE-2-221-92-2018	DE-2-221	1	119	39.9	109	3.6	113	3.4	108	4	106	122	110
DE-2-313-96-2018-K	DE-7-322	1	114		103		106		104		107	117	105

Colony without performance tests