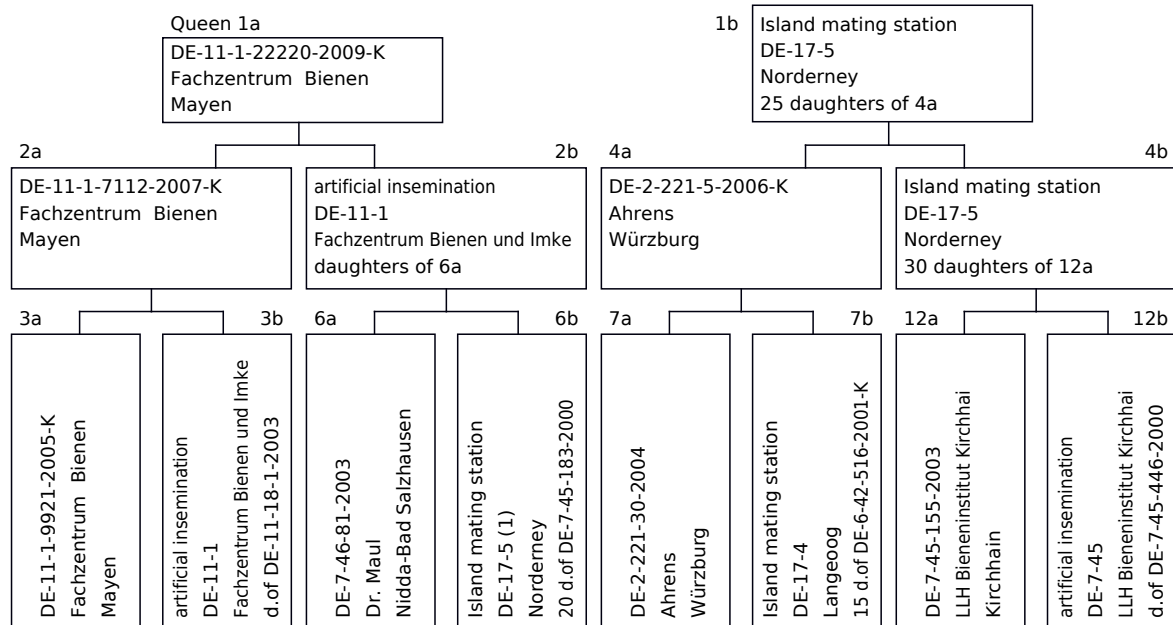


Tester of the queen: Fachzentrum Bienen, Mayen, 56727 Mayen, DE-11-1, Apiary 3
 Breeder of the queen: Fachzentrum Bienen, Mayen, 56727 Mayen, DE-11-1
1a Studbook number: **DE-11-1-22220-2009-K**

Race line: -0 Sign: green 20 Daughters of Queen: 0%
 Generation: 3 Hatch date: 15.06.2009 Workers: 0.3%

A. Pedigree



B. Own performance

Performance test year	No. of the colony 458			comparable colonies at the apiary	
	kg	%	Ranking	number	Yield average kg
	81.2	147.6	2	13	55.0
	Assessment*	Breeding values			Reliability
Total breeding value¹	-	130			
Honey yield	-	124			0.43
Defensive behavior	3.80	119			0.63
Steadiness on comb	3.90	119			0.66
Swarming drive	4	114			0.43
Varroa	-	130			0.53
Performance index	-	0			
Robustness in winter			70%	100%	170%
Development in Spring					
Colony strength					

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-11-1-22220-2009-K

Page 2

Performance of the sisters

Amount of checked sisters: 9

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-11-1-22220-2009-K	DE-11-1	3	130	81.2	124	3.8	119	3.9	119	4	114	130	
DE-11-1-22221-2009	DE-11-1	3	113	54.4	104	3.6	109	3.7	109	3.6	100	117*	
DE-11-1-22219-2009-K	DE-11-1	4	122	81.7	110	4	109	3.9	108	1	88	136	
DE-11-1-22216-2009	DE-11-19	19	124		115		118		117		96	128	
DE-11-1-22217-2009	DE-11-19	19	122		107		112		111		93	134	
DE-11-63-42-2009	DE-11-63	1	99		103		96		98		96	101	
DE-11-63-43-2009	DE-11-63	1	120		110		116		116		102	123	
DE-11-63-46-2009	DE-11-63	1	103		95		85		83		82	127	
DE-11-63-47-2009	DE-11-63	1	108		104		93		91		88	126	

Only one Varroa trait was recorded