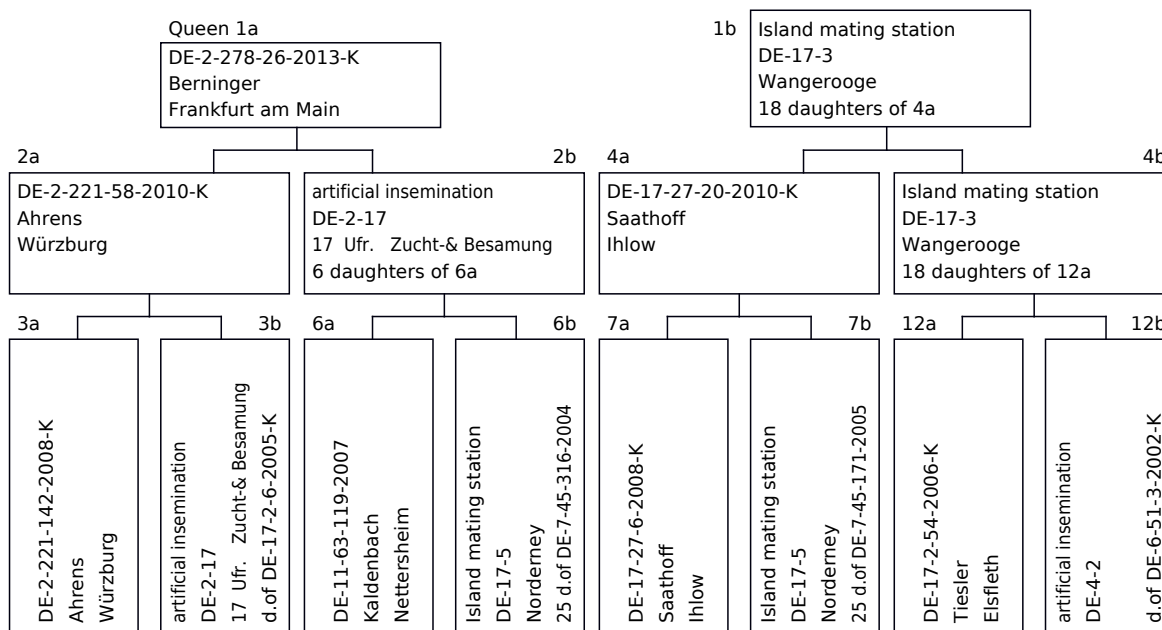


Tester of the queen: Berninger, Andreas, 60386 Frankfurt am Main, DE-2-278, Apiary 1
 Breeder of the queen: Berninger, Andreas, 60386 Frankfurt am Main, DE-2-278
1a Studbook number: **DE-2-278-26-2013-K**

Race line: Sign: red 57 Daughters of Queen: 0.4%
 Generation: 1 Hatch date: 10.07.2013 Workers: 0.5%

A. Pedigree



B. Own performance

Performance test year	No. of the colony			comparable colonies at the apiary	
	kg	%	Ranking	number	Yield average kg
	11.5	87.9	8	10	13.1
	Assessment*	Breeding values			Reliability
Total breeding value¹	-	114			
Honey yield	-	105			0.42
Defensive behavior	3.40	107			0.62
Steadiness on comb	3.60	105			0.64
Swarming drive	4	108			0.43
Varroa	-	117			0.53
Performance index	-	0			
Robustness in winter	3		70%	100%	170%
Development in Spring	2.50				
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%.

C. Performance of the sisters

See page 2

D. Body features, see appendix

none Analysis of race characteristics

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-2-278-26-2013-K

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Performance of the sisters

Amount of checked sisters: 16

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-2-278-25-2013	DE-2-278	1	106	14.5	105	3.2	105	3.3	105	4	105	110	
DE-2-278-26-2013-K	DE-2-278	1	114	11.5	105	3.4	107	3.6	105	4	108	117	
DE-2-278-27-2013	DE-2-278	1	123	5	102	3.7	118	3.7	115	4	110	129	
DE-2-278-28-2013	DE-2-278	1	110	16.5	105	3.2	97	3.3	94	3	89	125	
DE-2-278-30-2013	DE-2-278	1	111	12.5	107	3.6	115	3.7	115	4	117	102	
DE-2-278-31-2013	DE-2-278	1	92	4	95	3.1	90	3.1	91	4	105	91	
DE-2-278-32-2013	DE-2-278	1	109	12	103	3.3	102	3.5	101	3	93	117	
DE-2-283-80-2013	DE-2-283	1	107		108		98		97		97	(114)	
DE-2-283-81-2013	DE-2-283	1	113		110		105		104		113	(114)	
DE-2-283-85-2013	DE-2-283	1	113		109		106		105		101	(117)	
DE-2-283-89-2013	DE-2-283	1	106		105		95		94		108	(111)	
DE-2-221-32-2013	DE-7-45	2	106		104		101		100		101	110	
DE-2-221-30-2013	DE-7-45	3	97		103		94		95		106	95	
DE-2-221-29-2013	DE-7-177	1	120		104		112		109		107	127	
DE-2-221-33-2013**	DE-7-320	1	108		(100)		(103)		(101)		(103)	(112)	
DE-2-221-34-2013**	DE-7-320	1	108		(100)		(103)		(101)		(103)	(112)	

Colony without performance tests