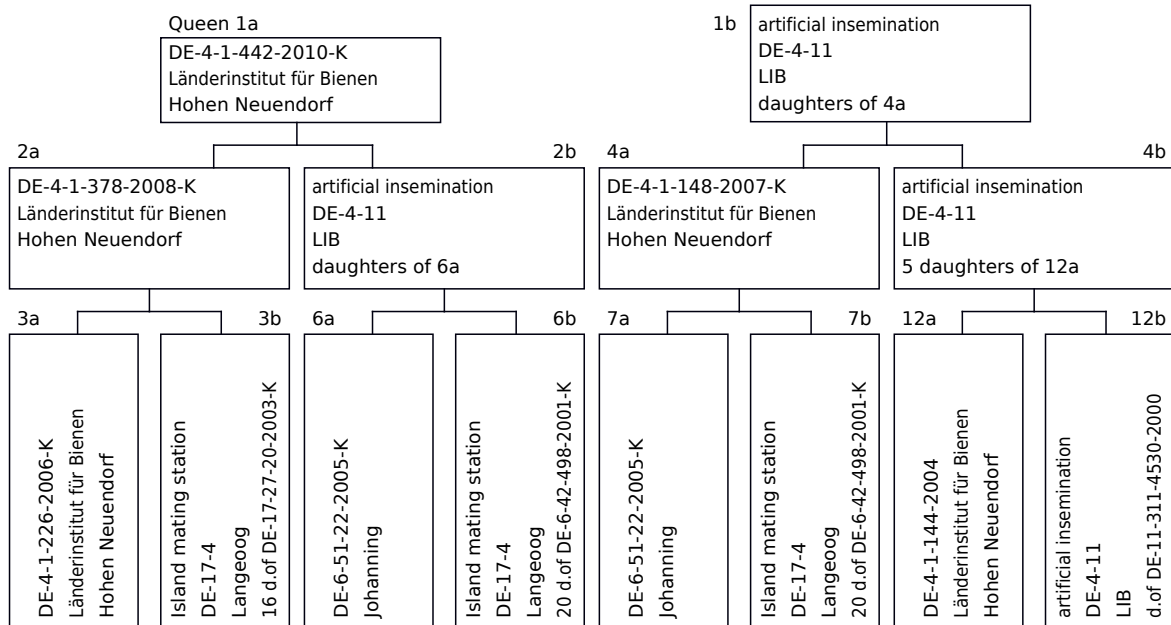








Tester of the queen: Länderinstitut für Bienenkunde, 16540 Hohen Neuendorf, DE-4-1, Apiary 1
 Breeder of the queen: Länderinstitut für Bienenkunde, 16540 Hohen Neuendorf, DE-4-1
1a Studbook number: **DE-4-1-442-2010-K**

Race line: -33 Sign: blue Daughters of Queen: 0.2%
 Generation: Hatch date: 21.6.2010 Workers: 3.9%

A. Pedigree



B. Own performance

Performance test year	No. of the colony 214			comparable colonies at the apiary		
	kg	%	Ranking	number	Yield average kg	
	62.5	129.7	3	28	48.2	
	Assessment*	Breeding values			Reliability	
Total breeding value¹	-	107				
Honey yield	-	119				0.42
Defensive behavior	3.40	111				0.64
Steadiness on comb	3.30	112				0.67
Swarming drive	4	120				0.42
Varroa	-	90				0.53
Performance index	-	0				
Robustness in winter	3					
Development in Spring	3.20					
Colony strength	3.30					

70% 100% 170%

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 A

Suitable for breeding with no restrictions; suitable for use as a 4a colony at frequently visited mating stations (all customary breeding values over 100).

Breeding selection report DE-4-1-442-2010-K

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Performance of the sisters

Amount of checked sisters: 11

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-4-1-440-2010	DE-4-1	1	97	41	103	3.6	103	3.3	110	4	115	73	
DE-4-1-442-2010-K	DE-4-1	1	107	62.5	119	3.4	111	3.3	112	4	120	90	
DE-4-1-443-2010	DE-4-1	1	103	62.4	118	3.5	113	3.3	115	3.2	115	82	
DE-4-1-444-2010	DE-4-1	1	102	55.4	116	3.6	120	3.6	123	4	127	72	
DE-4-1-445-2010	DE-4-1	1	91	48.1	107	3.4	107	3.1	111	4	121	65	
DE-4-1-446-2010	DE-4-1	1	117	50.9	113	3.7	122	3.6	122	4	121	104	
DE-4-1-428-2010	DE-4-1	2	112	55.3	114	3.7	114	3.5	115	3.3	112	102	
DE-4-1-430-2010	DE-4-1	2	101	65.2	120	3.6	108	3.1	110	3.9	123	79	
DE-4-1-432-2010	DE-4-1	2	100	57.9	116	3.7	110	3.2	113	4	126	76	
DE-4-1-439-2010	DE-4-1	2	100	50.4	111	3.7	112	3.4	115	4	125	77	
DE-4-1-172-2010	DE-15-10	2	92		90		104		105		106	82	