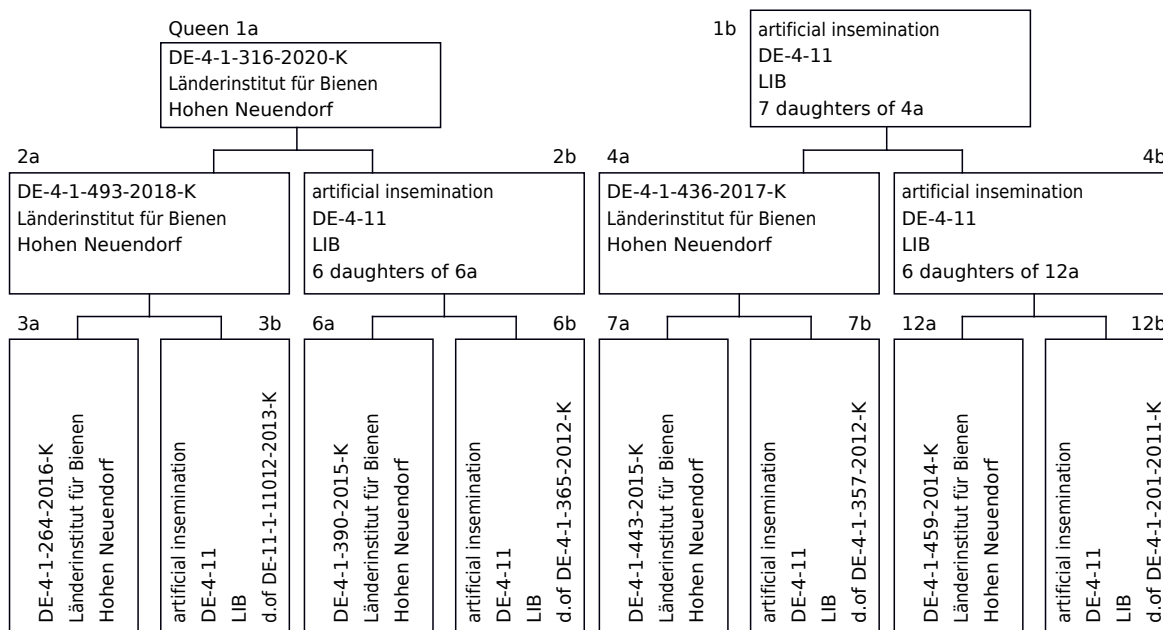


Tester of the queen: Länderinstitut für Bienenkunde, 16540 Hohen Neuendorf, DE-4-1, Apiary 2
 Breeder of the queen: Länderinstitut für Bienenkunde, 16540 Hohen Neuendorf, DE-4-1
1a Studbook number: **DE-4-1-316-2020-K**

Race line: -33 Sign: blue 16 Daughters of Queen: 4.7%
 Generation: Hatch date: 17.06.2020 Workers: 7.9%

A. Pedigree



B. Own performance

| Performance test year | No. of the colony 115 | | | comparable colonies at the apiary | | |
|---|-----------------------|-----------------|---------|-----------------------------------|------------------|------|
| | kg | % | Ranking | number | Yield average kg | |
| | 28.6 | 106.8 | 13 | 32 | 26.8 | |
| | Assessment* | Breeding values | | | Reliability | |
| Total breeding value¹ | - | 108 | ■ | | | |
| Honey yield | - | 101 | | | | 0.48 |
| Defensive behavior | 3.60 | 106 | ■ | | | 0.58 |
| Steadiness on comb | 3.60 | 107 | ■ | | | 0.58 |
| Swarming drive | 4 | 104 | ■ | | | 0.52 |
| Varroa | - | 107 | ■ | | | 0.53 |
| Performance index | - | 105 | ■ | | | 0.48 |
| Robustness in winter | 3.60 | 70% 100% 170% | | | | |
| Development in Spring | 3.60 | | | | | |
| Colony strength | 3.50 | | | | | |

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-4-1-316-2020-K

Page 2

Performance of the sisters

Amount of checked sisters: 10

| 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-4-1-303-2020 | DE-4-1 | 1 | 103 | 21.4 | 98 | 3.5 | 105 | 3.3 | 107 | 4 | 105 | 98 | 105 |
| DE-4-1-304-2020-K | DE-4-1 | 1 | 106 | 40.4 | 105 | 3.4 | 105 | 3.2 | 106 | 4 | 105 | 103 | 106 |
| DE-4-1-315-2020 | DE-4-1 | 1 | 103 | 33.8 | 103 | 3.4 | 106 | 3.3 | 107 | 4 | 105 | 97 | 106 |
| DE-4-1-318-2020-K | DE-4-1 | 1 | 110 | 24 | 100 | 3.6 | 110 | 3.7 | 112 | 4 | 106 | 107 | 108 |
| DE-4-1-319-2020-K | DE-4-1 | 1 | 107 | 32.8 | 102 | 3.4 | 105 | 3.2 | 106 | 4 | 105 | 106 | 105 |
| DE-4-1-306-2020 | DE-4-1 | 2 | 108 | 43.3 | 105 | 3.6 | 106 | 3.7 | 108 | 4 | 105 | 106 | 107 |
| DE-4-1-308-2020 | DE-4-1 | 2 | 104 | 28.1 | 100 | 3.2 | 101 | 3.2 | 102 | 4 | 103 | 104 | 102 |
| DE-4-1-314-2020 | DE-4-1 | 2 | 103 | 30.6 | 101 | 3.5 | 104 | 3.4 | 105 | 3.6 | 101 | 101 | 103 |
| DE-4-1-316-2020-K | DE-4-1 | 2 | 108 | 28.6 | 101 | 3.6 | 106 | 3.6 | 107 | 4 | 104 | 107 | 105 |
| DE-4-1-324-2020-K | DE-4-1 | 2 | 105 | 35.5 | 103 | 3.6 | 104 | 3.3 | 104 | 4 | 104 | 102 | 104 |