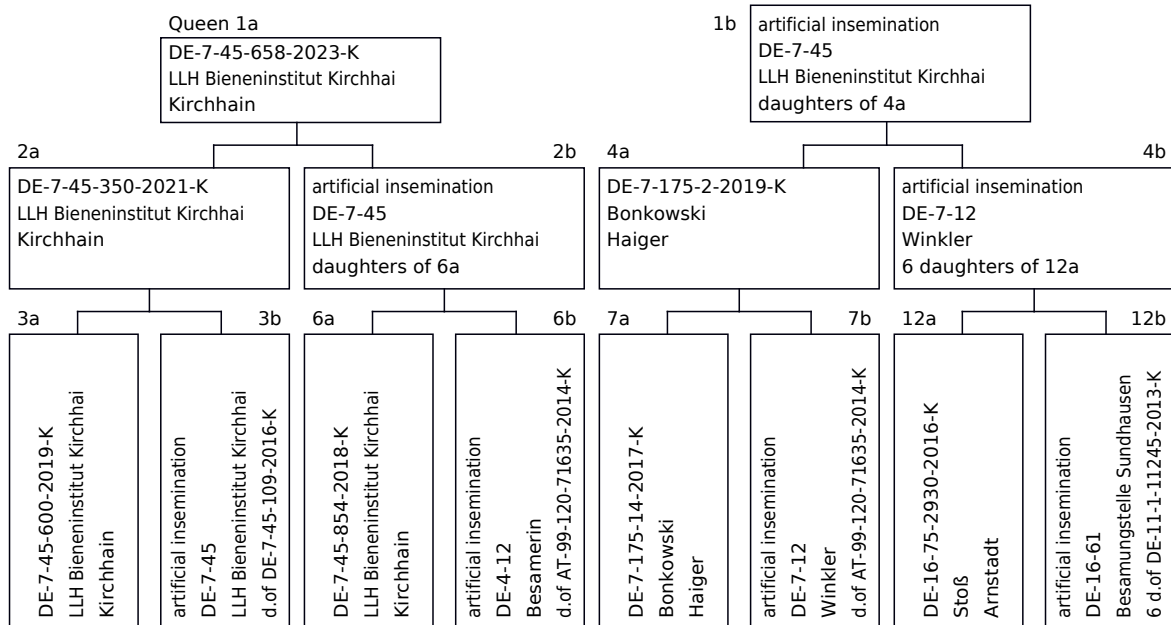


Tester of the queen: LLH Bieneninstitut Kirchhain, 35274 Kirchhain, DE-7-45, Apiary 4  
 Breeder of the queen: LLH Bieneninstitut Kirchhain, 35274 Kirchhain, DE-7-45  
**1a** Studbook number: **DE-7-45-658-2023-K**

Race line: -Carnica Sign: red 81-6 Daughters of Queen: 5.6%  
 Generation: 5 Hatch date: 19.06.2023 Workers: 4.2%

### A. Pedigree



### B. Own performance

| Performance test year                   | No. of the colony 321 |                 |         | comparable colonies at the apiary |                  |
|---|-----------------------|-----------------|---------|-----------------------------------|------------------|
|   | kg                    | %               | Ranking | number                            | Yield average kg |
|   | 60.2                  | 176.3           | 2       | 20                                | 34.1             |
|   | Assessment*           | Breeding values |         |                                   | Reliability      |
| <b>Total breeding value<sup>1</sup></b> | -                     | 120             |         |                                   |                  |
| Honey yield                             | -                     | 108             |         |                                   | 0.48             |
| Defensive behavior                      | 3.50                  | 116             |         |                                   | 0.57             |
| Steadiness on comb                      | 3.20                  | 112             |         |                                   | 0.57             |
| Swarming drive                          | 3                     | 112             |         |                                   | 0.5              |
| Varroa                                  | -                     | 119             |         |                                   | 0.52             |
| Performance index                       | -                     | 114             |         |                                   | 0.48             |
| Robustness in winter                    |                       |                 | 70%     | 100%                              | 170%             |
| Development in Spring                   |                       |                 |         |                                   |                  |
| Colony strength                         |                       |                 |         |                                   |                  |

<sup>1</sup>In 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-7-45-658-2023-K

## Page 2

### Performance of the sisters

Amount of checked sisters: 8

| 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-7-45-651-2023   | DE-7-45             | 1      | 117                  | 39.5     | 107                  | 3.4                | 114                               | 3.2                        | 107                     | 4              | 113                     | 115          | 114               |
| DE-7-45-652-2023   | DE-7-45             | 3      | 114                  | 61.8     | 106                  | 3.4                | 113                               | 2.7                        | 108                     | 4              | 113                     | 112          | 112               |
| DE-7-45-657-2023   | DE-7-45             | 3      | 114                  | 0        | 104                  | 3                  | 110                               | 2.8                        | 107                     | 4              | 113                     | (114)        | 110               |
| DE-7-45-658-2023-K | DE-7-45             | 4      | 120                  | 60.2     | 108                  | 3.5                | 116                               | 3.2                        | 112                     | 3              | 112                     | 119          | 114               |
| DE-7-45-650-2023   | DE-7-320            | 1      | 113                  |          | 100                  |                    | 111                               |                            | 108                     |                | 111                     | 112          | 109               |
| DE-7-45-654-2023-K | DE-7-328            | 1      | 117                  |          | 107                  |                    | 111                               |                            | 107                     |                | 114                     | 117          | 112               |
| DE-7-45-653-2023   | DE-18-26            | 3      | 103                  |          | 96                   |                    | 96                                |                            | 96                      |                | 107                     | 106          | 99                |
| DE-7-45-662-2023   | DE-41-13            | 1      | 119                  |          | (106)                |                    | 116                               |                            | 113                     |                | 114                     | 117*         | 115               |

Only one Varroa trait was recorded