

**Table S1.** Average PH of camelina accessions for two growing seasons (2017/18 and 2018/19).

|         | Plant Height (PH) (cm)      |              |                |               |                             |              |              |              |
|---------|-----------------------------|--------------|----------------|---------------|-----------------------------|--------------|--------------|--------------|
|         | Location 1 (Rimski Šančevi) |              |                |               | Location 2 (Bački Petrovac) |              |              |              |
|         | Y1A (E1)                    | Y1S (E3)     | Y2A (E5)       | Y2S (E7)      | Y1A (E2)                    | Y1S (E4)     | Y2A (E6)     | Y2S (E8)     |
| G1      | 78.7 ± 7.27                 | 64.8 ± 5.66  | 112.47 ± 11.25 | 112.03 ± 4.53 | 89.23 ± 11.35               | 71.83 ± 4.03 | 81.77 ± 6.47 | 92.53 ± 5.23 |
| G2      | 73.27 ± 4.68                | 61.23 ± 6.99 | 105.37 ± 7.47  | 104.27 ± 5.64 | 85.6 ± 6.67                 | 69.33 ± 4.52 | 74.47 ± 4.59 | 83.73 ± 6.48 |
| G3      | 80.77 ± 7.09                | 64.73 ± 5.91 | 106.27 ± 7.88  | 110.8 ± 5.8   | 86.87 ± 8.07                | 68.7 ± 6.26  | 80.1 ± 5.09  | 85.6 ± 6.43  |
| G4      | 81.97 ± 6.99                | 63.3 ± 6.38  | 106.23 ± 7.33  | 106.73 ± 5.87 | 94.93 ± 8.3                 | 73.47 ± 4.92 | 81.7 ± 4.89  | 91.23 ± 7.02 |
| G5      | 79 ± 6.24                   | 68.17 ± 5.81 | 99.17 ± 7.61   | 107.27 ± 6.27 | 83.83 ± 7.51                | 70.83 ± 5.03 | 80.97 ± 5.58 | 92.2 ± 6.58  |
| G6      | 81.3 ± 6.6                  | 65.2 ± 5.94  | 106.57 ± 6.98  | 104.03 ± 4.93 | 93.47 ± 9.34                | 69.4 ± 5.32  | 89.9 ± 5.94  | 91 ± 4.88    |
| G7      | 77.73 ± 6.18                | 63.87 ± 4.43 | 106.73 ± 7.06  | 105.37 ± 4.24 | 80.7 ± 6.82                 | 73.87 ± 3.71 | 82.17 ± 5.1  | 88.73 ± 6.31 |
| G8      | 78.57 ± 6.34                | 59.87 ± 3.44 | 106.8 ± 4.75   | 104.67 ± 5.14 | 91.63 ± 8.33                | 75.2 ± 4.67  | 83.2 ± 5.02  | 90 ± 5.63    |
| G9      | 70.97 ± 7.04                | 62.8 ± 4.89  | 102.97 ± 5.14  | 104.73 ± 4.51 | 79.57 ± 7.45                | 67.87 ± 5.55 | 77.73 ± 3.56 | 85.17 ± 4.39 |
| G10     | 77.23 ± 6.69                | 62.73 ± 5.05 | 99.8 ± 6.65    | 100.03 ± 5.85 | 83.13 ± 7.02                | 68.27 ± 3.83 | 75.83 ± 4.17 | 85.83 ± 5.38 |
| G11     | 75.83 ± 7.21                | 61.27 ± 4.78 | 110.3 ± 6.84   | 107.13 ± 5.8  | 87.5 ± 8.26                 | 74.57 ± 4.85 | 81.6 ± 6.97  | 87.47 ± 6.46 |
| G12     | 68.33 ± 7.33                | 67.13 ± 6.49 | 107.17 ± 4.63  | 102.83 ± 5.78 | 82.87 ± 8.74                | 73.5 ± 5.08  | 81.3 ± 5.89  | 86.8 ± 4.9   |
| G13     | 78.8 ± 5.18                 | 64.93 ± 5.95 | 99.73 ± 7.37   | 101.83 ± 6.74 | 84.8 ± 7.2                  | 74.07 ± 4.91 | 80.17 ± 5.61 | 91.7 ± 5.68  |
| G14     | 70.7 ± 5.07                 | 60.87 ± 5.2  | 102.1 ± 7.35   | 101.6 ± 4.73  | 79.43 ± 7.31                | 65.17 ± 4.92 | 78.87 ± 5.76 | 88.47 ± 3.3  |
| G15     | 68.63 ± 5.63                | 60.23 ± 4.5  | 108.17 ± 7.26  | 103.53 ± 5.94 | 83.57 ± 5.78                | 65.13 ± 4.45 | 77.73 ± 4.32 | 85.8 ± 3.75  |
| G16     | 77.13 ± 6.55                | 63.4 ± 4.75  | 109.2 ± 5.55   | 104.57 ± 5.81 | 80.5 ± 11.01                | 69.17 ± 5.71 | 75.47 ± 4.7  | 88.4 ± 4.76  |
| G17     | 68.77 ± 6.81                | 65.07 ± 5.23 | 106.1 ± 6.86   | 105.53 ± 5.71 | 72.23 ± 5.86                | 75.07 ± 4.65 | 79.3 ± 5.87  | 86.2 ± 5.29  |
| G18     | 76.77 ± 6.63                | 63.07 ± 4.88 | 104.03 ± 6.68  | 99.43 ± 5.05  | 78.13 ± 10.88               | 67.2 ± 4.97  | 77.33 ± 4.71 | 84.37 ± 5.01 |
| G19     | 70.93 ± 5.4                 | 59.3 ± 5.54  | 103.27 ± 6.37  | 101.37 ± 6.64 | 77.13 ± 8.23                | 69.23 ± 5.54 | 76.37 ± 3.94 | 81.63 ± 5.36 |
| G20     | 74.2 ± 6.89                 | 59.83 ± 3.66 | 103.27 ± 7.21  | 105.07 ± 5.71 | 81.87 ± 5.78                | 66.1 ± 5.92  | 76.33 ± 4.67 | 88.57 ± 5.48 |
| Average | 75.48 ± 6.39                | 63.09 ± 5.27 | 105.29 ± 6.91  | 104.64 ± 5.53 | 83.85 ± 8                   | 70.4 ± 4.94  | 79.62 ± 5.14 | 87.77 ± 5.42 |

Y1A – first autumn growing season; Y1S – first spring growing season; Y2A – second autumn growing season; Y2S – second spring growing season; (mean ± standard deviation).

**Table S2.** Average HFB of camelina accessions for two growing seasons (2017/18 and 2018/19).

|     | Height to the First Lateral Branch (HFB) (cm) |              |               |               |                             |              |               |               |
|-----|---|--------------|---------------|---------------|-----------------------------|--------------|---------------|---------------|
|     | Location 1 (Rimski Šančevi)                   |              |               |               | Location 2 (Bački Petrovac) |              |               |               |
|     | Y1A (E1)                                      | Y1S (E3)     | Y2A (E5)      | Y2S (E7)      | Y1A (E2)                    | Y1S (E4)     | Y2A (E6)      | Y2S (E8)      |
| G1  | 39.03 ± 10.58                                 | 37.53 ± 5.67 | 39.53 ± 13.35 | 55.97 ± 11.6  | 26.67 ± 12.16               | 38.1 ± 6.49  | 11.43 ± 8.59  | 43.63 ± 9.13  |
| G2  | 36.87 ± 9.63                                  | 35.47 ± 7.49 | 44.23 ± 19.09 | 53.57 ± 13.51 | 23.37 ± 14.89               | 39.83 ± 7.5  | 9.2 ± 9.02    | 34.8 ± 16.35  |
| G3  | 44.2 ± 10.62                                  | 37.87 ± 5.22 | 37.67 ± 16.7  | 52.87 ± 15.08 | 21.43 ± 13.8                | 35.9 ± 8.27  | 11.23 ± 11.73 | 37.33 ± 14.24 |
| G4  | 37.83 ± 14.28                                 | 38.4 ± 5.97  | 36.27 ± 12.77 | 46.4 ± 12.61  | 20.53 ± 18.77               | 39.43 ± 8.79 | 5.9 ± 6.84    | 29.73 ± 13.81 |
| G5  | 38.7 ± 8.75                                   | 40.17 ± 5    | 37.67 ± 15.77 | 53.33 ± 11.19 | 26.33 ± 14.39               | 41.3 ± 7.37  | 10.53 ± 8.52  | 41.2 ± 15.43  |
| G6  | 42.1 ± 11.89                                  | 38.57 ± 5.43 | 44.23 ± 18.74 | 55.77 ± 6.7   | 31.17 ± 16.94               | 37.47 ± 8.25 | 9.3 ± 7.39    | 45.53 ± 6.65  |
| G7  | 41.07 ± 8.32                                  | 39.3 ± 4.82  | 50.4 ± 17.2   | 55.87 ± 11.05 | 29.8 ± 14.28                | 40.53 ± 6.32 | 11.87 ± 11.47 | 36.73 ± 13.03 |
| G8  | 46.53 ± 11.28                                 | 37.37 ± 3.63 | 49.23 ± 14.74 | 56.33 ± 8.93  | 32.7 ± 17.25                | 39.07 ± 5.28 | 10.17 ± 8.03  | 37.37 ± 16.89 |
| G9  | 38.3 ± 7.54                                   | 38.27 ± 2.88 | 44.7 ± 19.49  | 53.63 ± 9.18  | 18.93 ± 12.55               | 37.7 ± 6.49  | 9.47 ± 5.88   | 31.37 ± 16.76 |
| G10 | 43.2 ± 12.35                                  | 38.67 ± 3.78 | 39.57 ± 15.05 | 54.8 ± 6.88   | 31.87 ± 15.52               | 37.33 ± 5.59 | 10.27 ± 8.89  | 39.53 ± 14.9  |
| G11 | 45.57 ± 7.31                                  | 38.9 ± 3.94  | 51.1 ± 7.2    | 53.1 ± 6.77   | 25.97 ± 14.86               | 37.73 ± 6.43 | 17.9 ± 7.88   | 44.77 ± 9.88  |
| G12 | 38.53 ± 11.66                                 | 40.77 ± 5.7  | 47.13 ± 13.75 | 52.97 ± 14.24 | 26.67 ± 15.49               | 36.17 ± 9.54 | 18.63 ± 9.36  | 41.8 ± 10.78  |
| G13 | 42.5 ± 10.99                                  | 37.1 ± 5.29  | 40.3 ± 15.9   | 51.77 ± 7.1   | 28.1 ± 12.3                 | 40.87 ± 5.22 | 15.5 ± 9.57   | 42.93 ± 10.51 |
| G14 | 36.7 ± 11.41                                  | 35.73 ± 4.62 | 51.43 ± 11.78 | 55.9 ± 6.34   | 27.87 ± 12.26               | 33.6 ± 5.36  | 16.73 ± 10.76 | 44.2 ± 11.19  |
| G15 | 37.03 ± 8.79                                  | 34 ± 3.29    | 51.07 ± 6.4   | 57.13 ± 10.83 | 29.27 ± 14.58               | 35.6 ± 5.39  | 10.2 ± 6.72   | 32.57 ± 19.11 |
| G16 | 43.33 ± 7.76                                  | 36.4 ± 4.52  | 46.53 ± 11.93 | 50.47 ± 8.58  | 24.37 ± 14.57               | 34.63 ± 6.38 | 14.53 ± 10.02 | 38.2 ± 12.06  |
| G17 | 39.9 ± 7.08                                   | 39.3 ± 5.49  | 50.4 ± 12.77  | 51.17 ± 11.26 | 22.57 ± 11.35               | 40.2 ± 7.83  | 14.87 ± 10.95 | 41.5 ± 6.52   |
| G18 | 44.63 ± 8.45                                  | 39.1 ± 5.42  | 48.67 ± 10.14 | 48.7 ± 6.65   | 27.53 ± 11.61               | 32 ± 11.39   | 17.63 ± 8.69  | 36.33 ± 7.67  |

|         |              |              |               |              |               |              |              |               |
|---------|--------------|--------------|---------------|--------------|---------------|--------------|--------------|---------------|
| G19     | 38.2 ± 8.59  | 33.47 ± 6.55 | 45.73 ± 9.88  | 49.63 ± 9.22 | 22.57 ± 13.5  | 34.83 ± 6.48 | 15.77 ± 9.17 | 37.07 ± 6.59  |
| G20     | 40.87 ± 8.22 | 35.93 ± 3.93 | 44.7 ± 8.66   | 55.77 ± 9.57 | 29.23 ± 14.05 | 32.87 ± 5.99 | 14.17 ± 8.76 | 41.53 ± 9.33  |
| Average | 40.76 ± 9.78 | 37.62 ± 4.93 | 45.03 ± 13.57 | 53.26 ± 9.86 | 26.35 ± 14.26 | 37.26 ± 7.02 | 12.77 ± 8.91 | 38.91 ± 12.04 |

**Table S3.** Average NLB of camelina accessions for two growing seasons (2017/18 and 2018/19).

| Number of Lateral Branches (NLB) |             |             |              |                             |             |             |             |              |
|----------------------------------|-------------|-------------|--------------|-----------------------------|-------------|-------------|-------------|--------------|
| Location 1 (Rimski Šančevi)      |             |             |              | Location 2 (Bački Petrovac) |             |             |             |              |
|                                  | Y1A (E1)    | Y1S (E3)    | Y2A (E5)     | Y2S (E7)                    | Y1A (E2)    | Y1S (E4)    | Y2A (E6)    | Y2S (E8)     |
| G1                               | 7 ± 1.55    | 6.5 ± 1.92  | 10.23 ± 2.76 | 7.63 ± 1.79                 | 6 ± 2.8     | 6.93 ± 1.43 | 7.7 ± 2.96  | 8.67 ± 1.75  |
| G2                               | 6.33 ± 1.79 | 6 ± 2.03    | 8.8 ± 3.07   | 8.37 ± 2.65                 | 8.57 ± 3.26 | 7.93 ± 2.25 | 8.57 ± 2.08 | 11.07 ± 3.1  |
| G3                               | 6.53 ± 1.31 | 5.4 ± 1.11  | 9.6 ± 2.96   | 8.27 ± 2.27                 | 5.23 ± 1.68 | 6.9 ± 2.06  | 8.67 ± 1.82 | 8.3 ± 1.78   |
| G4                               | 7.43 ± 2.05 | 6 ± 1.53    | 10.7 ± 2.45  | 9.07 ± 2.79                 | 7.4 ± 3.39  | 8 ± 2.46    | 8.77 ± 1.9  | 10.93 ± 2.52 |
| G5                               | 6.73 ± 1.66 | 5.3 ± 1.28  | 9.73 ± 2.5   | 8.23 ± 1.71                 | 6.9 ± 2.79  | 6.03 ± 1.54 | 8.67 ± 1.54 | 9.1 ± 2.65   |
| G6                               | 6.23 ± 1.93 | 5.57 ± 1.37 | 10.13 ± 2.84 | 7.3 ± 1.36                  | 8.23 ± 2.25 | 7.1 ± 2.27  | 8.53 ± 1.64 | 9.03 ± 2.13  |
| G7                               | 6.93 ± 1.83 | 5.63 ± 1.53 | 8.57 ± 2.48  | 8.23 ± 1.78                 | 8.4 ± 2.18  | 7.03 ± 1.55 | 8.1 ± 1.03  | 10.37 ± 2.64 |
| G8                               | 6.67 ± 2.02 | 4.77 ± 1.38 | 8.37 ± 1.88  | 7.87 ± 2.48                 | 8.03 ± 2.38 | 7.2 ± 1.69  | 8.03 ± 1.66 | 9.27 ± 2.3   |
| G9                               | 6.23 ± 1.72 | 4.73 ± 1.42 | 7.73 ± 2.63  | 8.2 ± 2.55                  | 7.53 ± 3.07 | 6.63 ± 1.71 | 7.73 ± 1.93 | 9.37 ± 3.06  |
| G10                              | 6.03 ± 1.73 | 6.33 ± 1.78 | 9.27 ± 1.97  | 8.1 ± 2.29                  | 8.67 ± 3.14 | 8 ± 1.6     | 7.93 ± 2.04 | 8.77 ± 2.47  |
| G11                              | 5.6 ± 2.01  | 4.8 ± 1.27  | 8.9 ± 1.88   | 8.57 ± 2.25                 | 9.23 ± 2.99 | 9.07 ± 1.95 | 8.43 ± 2.47 | 8.77 ± 2.2   |
| G12                              | 5.83 ± 2.4  | 5.67 ± 1.73 | 8.67 ± 1.73  | 8.33 ± 2.68                 | 8.23 ± 2.88 | 8.5 ± 2.33  | 7.97 ± 1.69 | 8.2 ± 1.8    |
| G13                              | 6.07 ± 1.71 | 5.87 ± 1.72 | 8.17 ± 2.14  | 8.23 ± 1.51                 | 7.4 ± 2.34  | 6.67 ± 1.86 | 8 ± 2.07    | 7.67 ± 1.65  |
| G14                              | 6.5 ± 2.26  | 5.1 ± 1.47  | 7.47 ± 2.15  | 7.7 ± 1.89                  | 8.3 ± 1.97  | 8 ± 2.21    | 8.07 ± 1.88 | 8.23 ± 2.04  |
| G15                              | 5.93 ± 1.74 | 5.87 ± 1.69 | 7.87 ± 1.83  | 7.43 ± 1.79                 | 7.43 ± 2.12 | 7.07 ± 1.88 | 8.33 ± 1.99 | 8.6 ± 2.56   |
| G16                              | 5.17 ± 1.51 | 6.37 ± 1.61 | 8.93 ± 2.41  | 9 ± 2.38                    | 8.07 ± 2.83 | 8.17 ± 2.78 | 6.5 ± 1.99  | 8.87 ± 2.66  |
| G17                              | 6 ± 1.63    | 6.27 ± 2.17 | 7.87 ± 2.01  | 9.2 ± 2.39                  | 8.5 ± 3.22  | 7.5 ± 2.08  | 7.67 ± 2.36 | 8.63 ± 1.95  |
| G18                              | 6.13 ± 2.26 | 5.5 ± 1.7   | 9.17 ± 2.45  | 8.23 ± 1.77                 | 8.77 ± 3.13 | 8.63 ± 2.31 | 8.4 ± 1.65  | 9.7 ± 2.2    |
| G19                              | 5.57 ± 1.93 | 5.53 ± 1.87 | 8.7 ± 1.99   | 7.73 ± 1.82                 | 7 ± 2.92    | 7.13 ± 1.78 | 8 ± 1.82    | 8.47 ± 1.78  |
| G20                              | 5.77 ± 1.75 | 5.67 ± 1.42 | 8.43 ± 1.65  | 7.43 ± 1.62                 | 8.2 ± 2.74  | 7.87 ± 2.33 | 7.73 ± 2.02 | 8.33 ± 1.95  |
| Average                          | 6.24 ± 1.84 | 5.64 ± 1.6  | 8.87 ± 2.29  | 8.16 ± 2.09                 | 7.81 ± 2.7  | 7.52 ± 2    | 8.09 ± 1.93 | 9.02 ± 2.26  |

**Table S4.** Average NSCP of camelina accessions for two growing seasons (2017/18 and 2018/19).

| Number of Seed Capsules Per Plant (NSCP) |                |               |                 |                             |                 |                |                |                |
|--|----------------|---------------|-----------------|-----------------------------|-----------------|----------------|----------------|----------------|
| Location 1 (Rimski Šančevi)              |                |               |                 | Location 2 (Bački Petrovac) |                 |                |                |                |
|  | Y1A (E1)       | Y1S (E3)      | Y2A (E5)        | Y2S (E7)                    | Y1A (E2)        | Y1S (E4)       | Y2A (E6)       | Y2S (E8)       |
| G1                                       | 178.17 ± 68.68 | 82.2 ± 37.58  | 382.47 ± 140.35 | 225.27 ± 96.79              | 202.9 ± 87.72   | 78.37 ± 34.23  | 250.9 ± 78.43  | 194.13 ± 56    |
| G2                                       | 159.17 ± 54.88 | 66.83 ± 34.26 | 340.1 ± 157.75  | 226.17 ± 82.75              | 223.53 ± 109.76 | 78.23 ± 34.39  | 255.47 ± 69.9  | 183.97 ± 75.84 |
| G3                                       | 154.63 ± 57.45 | 67.37 ± 18.45 | 364.23 ± 121.77 | 250.1 ± 80.58               | 162.63 ± 65.63  | 92.47 ± 52.51  | 260.27 ± 71.35 | 169.47 ± 49.14 |
| G4                                       | 167.87 ± 55.53 | 58.97 ± 16.64 | 361.47 ± 134.76 | 304.57 ± 120.13             | 193 ± 79.76     | 92.27 ± 40.67  | 270.2 ± 72.18  | 202.77 ± 66.9  |
| G5                                       | 170.67 ± 60.92 | 72.43 ± 25.87 | 365.63 ± 188.9  | 252.53 ± 67.35              | 163.3 ± 83.77   | 70.63 ± 22.9   | 246.43 ± 61.39 | 163.03 ± 70.17 |
| G6                                       | 168.13 ± 56.16 | 67.63 ± 26.77 | 391.13 ± 132.28 | 210.27 ± 67.28              | 204.73 ± 85.92  | 77.87 ± 36.36  | 240.97 ± 73.49 | 145.47 ± 39.51 |
| G7                                       | 178.47 ± 68.92 | 60.27 ± 18.02 | 292 ± 96.38     | 220.3 ± 67.79               | 181.83 ± 67.98  | 83.7 ± 32.18   | 228.9 ± 81.07  | 167 ± 49.93    |
| G8                                       | 129.93 ± 55.98 | 46.7 ± 18.56  | 285.93 ± 113.96 | 210.73 ± 69.24              | 164.53 ± 53.55  | 92 ± 33.43     | 229.27 ± 68.11 | 127.1 ± 34.64  |
| G9                                       | 134.27 ± 55.18 | 46.87 ± 18.88 | 293.17 ± 124.7  | 225.47 ± 60.94              | 150.1 ± 62.89   | 73.07 ± 29.61  | 245.73 ± 64.58 | 166.97 ± 58.88 |
| G10                                      | 133.3 ± 67.78  | 53.43 ± 16.37 | 336.7 ± 103.24  | 218.07 ± 74.71              | 180.53 ± 101.73 | 77.77 ± 28.71  | 211.7 ± 83.06  | 154.03 ± 67.35 |
| G11                                      | 127.23 ± 50.03 | 41.6 ± 13.12  | 350.27 ± 116.68 | 254.77 ± 83.08              | 218.07 ± 93.81  | 104.8 ± 41.83  | 229.27 ± 70.62 | 155.4 ± 54.68  |
| G12                                      | 132.97 ± 72.86 | 58.73 ± 27.63 | 356.17 ± 96.41  | 249.17 ± 94.71              | 183.23 ± 89.97  | 105.1 ± 44.11  | 223.17 ± 55.42 | 145.1 ± 42.1   |
| G13                                      | 137.73 ± 54.99 | 71.97 ± 47.22 | 288.2 ± 86.69   | 213.8 ± 52.91               | 155.57 ± 61.76  | 85.73 ± 56.61  | 182.33 ± 42.55 | 141.1 ± 39.39  |
| G14                                      | 191.87 ± 151   | 51.17 ± 21.44 | 301.57 ± 120.76 | 214.13 ± 61.54              | 165.1 ± 67.57   | 92.1 ± 32.2    | 203.9 ± 67.1   | 118.23 ± 40.83 |
| G15                                      | 129.03 ± 40.89 | 67.03 ± 24.55 | 326.07 ± 97.62  | 205.07 ± 77.7               | 156.4 ± 59.85   | 90.37 ± 43.11  | 215.67 ± 69.86 | 126.3 ± 39.33  |
| G16                                      | 141.83 ± 52.92 | 65.83 ± 21.13 | 392.63 ± 128.75 | 252.13 ± 80.41              | 197.53 ± 71.34  | 101.77 ± 47.78 | 170.23 ± 56.47 | 144.13 ± 61.34 |
| G17                                      | 131.7 ± 51.76  | 61.6 ± 27.17  | 308.87 ± 90.76  | 261.97 ± 81.14              | 175.2 ± 61.56   | 93.33 ± 36.65  | 218.27 ± 74    | 124.57 ± 42.12 |
| G18                                      | 153.1 ± 75.18  | 54.1 ± 22.28  | 332.63 ± 121.18 | 233.73 ± 57.94              | 135.43 ± 68.23  | 105 ± 40.22    | 257.93 ± 57.86 | 128.97 ± 37.93 |

|         |                |               |                 |                |                |               |                |                |
|---------|----------------|---------------|-----------------|----------------|----------------|---------------|----------------|----------------|
| G19     | 114.83 ± 40.45 | 55.3 ± 23.33  | 317.7 ± 73.55   | 214.3 ± 78.99  | 102.43 ± 55.61 | 79.77 ± 33.02 | 206.4 ± 53.57  | 119.57 ± 33.59 |
| G20     | 149.07 ± 46.61 | 58.87 ± 19.19 | 348.2 ± 96.63   | 206.03 ± 61.84 | 124.93 ± 58.75 | 96.77 ± 33.34 | 208.67 ± 64.84 | 119.57 ± 35.86 |
| Average | 149.2 ± 61.91  | 60.45 ± 23.92 | 336.76 ± 117.16 | 232.43 ± 75.89 | 172.05 ± 74.36 | 88.56 ± 37.69 | 227.78 ± 66.79 | 149.84 ± 49.78 |

**Table S5.** Average NSP of camelina accessions for two growing seasons (2017/18 and 2018/19).

|         | Number of Seeds Per Plant (NSP) |                 |                   |                   |  |                             |                 |                   |                   |  |
|---------|---------------------------------|-----------------|-------------------|-------------------|--|-----------------------------|-----------------|-------------------|-------------------|--|
|         | Location 1 (Rimski Šančevi)     |                 |                   |                   |  | Location 2 (Bački Petrovac) |                 |                   |                   |  |
|         | Y1A (E1)                        | Y1S (E3)        | Y2A (E5)          | Y2S (E7)          |  | Y1A (E2)                    | Y1S (E4)        | Y2A (E6)          | Y2S (E8)          |  |
| G1      | 1264.67 ± 643.51                | 449.03 ± 264.54 | 4473.3 ± 2130.25  | 2374.97 ± 1235.35 |  | 1744.4 ± 790.11             | 450.2 ± 263.62  | 2303.03 ± 949.68  | 2121 ± 887.44     |  |
| G2      | 1286.2 ± 643.52                 | 536.63 ± 279.23 | 4388.9 ± 2516.5   | 2840.1 ± 1299.9   |  | 2385.33 ± 1146.38           | 589.63 ± 304.95 | 2967.4 ± 1052.52  | 2624.6 ± 1328.31  |  |
| G3      | 1080.1 ± 536.66                 | 386 ± 136.36    | 3746.43 ± 1610.16 | 2883 ± 1342.22    |  | 1414.67 ± 651.1             | 594.27 ± 391.91 | 2434.17 ± 885.58  | 1861.83 ± 687.44  |  |
| G4      | 1032.53 ± 538.93                | 267.6 ± 115.55  | 3540.13 ± 1525.33 | 2875.87 ± 1427.68 |  | 1405.13 ± 725.26            | 568.7 ± 279.8   | 2156.8 ± 728.29   | 1935.43 ± 629.41  |  |
| G5      | 1009.13 ± 469.73                | 458.5 ± 234.63  | 3782.73 ± 2109.76 | 2625.97 ± 724.13  |  | 1471.57 ± 763.66            | 446.8 ± 211.17  | 2337.6 ± 751.93   | 2028.27 ± 1203.3  |  |
| G6      | 1247.23 ± 607.08                | 455 ± 233.36    | 5056.77 ± 2081.29 | 2511.3 ± 1077.07  |  | 1954.5 ± 917.04             | 484.5 ± 281.22  | 3757.37 ± 4876.76 | 1755.53 ± 578.69  |  |
| G7      | 1482 ± 743.83                   | 352.87 ± 152.89 | 3404.8 ± 1253.85  | 2669.03 ± 856.99  |  | 1884.6 ± 771.09             | 512.67 ± 271.45 | 2051.87 ± 930.67  | 2446.13 ± 1133.62 |  |
| G8      | 974.87 ± 534.17                 | 302.43 ± 156.82 | 3256.93 ± 1409.38 | 2769.07 ± 1070.9  |  | 1582.57 ± 652.14            | 645.2 ± 310.89  | 2130.2 ± 719.72   | 1557.3 ± 617.19   |  |
| G9      | 958.83 ± 467.42                 | 308.13 ± 188.84 | 3149.4 ± 1540.77  | 2502.8 ± 739.75   |  | 1502.37 ± 664.54            | 438.47 ± 202.74 | 2016.07 ± 633.81  | 2125.27 ± 1011.97 |  |
| G10     | 1111.8 ± 878.83                 | 383.87 ± 165.95 | 3776.27 ± 1541.33 | 2501.97 ± 889.35  |  | 1679.97 ± 1080.55           | 540.2 ± 270.27  | 1976.3 ± 923.15   | 2286.97 ± 1233.24 |  |
| G11     | 844.67 ± 373.58                 | 280.43 ± 119.12 | 3445.37 ± 1301.41 | 2772.7 ± 1251.15  |  | 1888.9 ± 874.37             | 593.7 ± 374.21  | 1979.23 ± 735.58  | 1968.87 ± 723.47  |  |
| G12     | 932.3 ± 719.23                  | 381.27 ± 182.23 | 3623.77 ± 1200.19 | 2902.47 ± 1133.88 |  | 1551.5 ± 948.76             | 612.53 ± 283.6  | 2313.87 ± 852.94  | 1994.4 ± 746.76   |  |
| G13     | 907.27 ± 445.21                 | 462.7 ± 406.49  | 2894.1 ± 1041.07  | 2543.87 ± 906.27  |  | 1218.13 ± 481.3             | 519.87 ± 460.58 | 1521.9 ± 571.61   | 1779.03 ± 635.18  |  |
| G14     | 1086.93 ± 490.56                | 349.2 ± 154.65  | 3492.9 ± 1480.41  | 2988.93 ± 1035.09 |  | 1728.73 ± 1136.34           | 564.8 ± 230.55  | 1852.27 ± 761.95  | 1718.07 ± 752.66  |  |
| G15     | 958.8 ± 546.37                  | 456.27 ± 223.13 | 3949.1 ± 1394.48  | 2908.57 ± 1474.38 |  | 1494.2 ± 669.71             | 635.47 ± 365.98 | 2490.17 ± 957.75  | 1938.17 ± 685.52  |  |
| G16     | 1048.77 ± 412.9                 | 396.63 ± 146.96 | 4551.23 ± 1646.03 | 3081.2 ± 1101.15  |  | 1819.07 ± 787.48            | 593.93 ± 298.71 | 1649.33 ± 783.75  | 2232.27 ± 1149.93 |  |
| G17     | 901.3 ± 402.71                  | 391.43 ± 228.08 | 2959.2 ± 965.93   | 2903.33 ± 1036.92 |  | 1370.97 ± 883.47            | 576.9 ± 236.77  | 1826.63 ± 831.24  | 1783.2 ± 816.9    |  |
| G18     | 809.67 ± 432.11                 | 352.67 ± 164.36 | 3280.3 ± 1623.97  | 2329.5 ± 775.64   |  | 972.93 ± 566.04             | 607.67 ± 245.33 | 2526.57 ± 670.55  | 1881.2 ± 771.15   |  |
| G19     | 642.77 ± 296.75                 | 338.6 ± 180     | 3226.3 ± 955.73   | 2314.4 ± 877.14   |  | 1179.8 ± 658.72             | 428.33 ± 211.3  | 1909.73 ± 647.79  | 1839.83 ± 656.14  |  |
| G20     | 1156.7 ± 513.34                 | 332.73 ± 141.56 | 3688.53 ± 1193.97 | 2233.8 ± 955.22   |  | 1222.07 ± 777.4             | 520.53 ± 235.77 | 1763.7 ± 628.15   | 1779.43 ± 726.84  |  |
| Average | 1036.83 ± 534.82                | 382.1 ± 193.74  | 3684.32 ± 1526.09 | 2676.64 ± 1060.51 |  | 1573.57 ± 797.27            | 546.22 ± 286.54 | 2198.21 ± 994.67  | 1982.84 ± 848.76  |  |

**Table S6.** Average MSP of camelina accessions for two growing seasons (2017/18 and 2018/19).

|     | Mass of Seeds Per Plant (MSP) (g) |             |             |             |                             |             |             |             |
|-----|-----------------------------------|-------------|-------------|-------------|-----------------------------|-------------|-------------|-------------|
|     | Location 1 (Rimski Šančevi)       |             |             |             | Location 2 (Bački Petrovac) |             |             |             |
|     | Y1A (E1)                          | Y1S (E3)    | Y2A (E5)    | Y2S (E7)    | Y1A (E2)                    | Y1S (E4)    | Y2A (E6)    | Y2S (E8)    |
| G1  | 0.94 ± 0.57                       | 0.38 ± 0.26 | 4.7 ± 2.37  | 1.87 ± 1.13 | 1.63 ± 0.82                 | 0.39 ± 0.26 | 2.1 ± 0.89  | 1.7 ± 0.63  |
| G2  | 0.89 ± 0.48                       | 0.41 ± 0.22 | 3.89 ± 2.56 | 1.92 ± 0.98 | 2.1 ± 0.89                  | 0.42 ± 0.22 | 2.15 ± 0.78 | 1.85 ± 0.93 |
| G3  | 0.81 ± 0.48                       | 0.45 ± 0.2  | 4.94 ± 1.63 | 2.73 ± 1.1  | 1.63 ± 0.69                 | 0.6 ± 0.37  | 2.19 ± 0.87 | 1.71 ± 0.68 |
| G4  | 0.85 ± 0.47                       | 0.27 ± 0.12 | 4.43 ± 1.99 | 2.61 ± 1.34 | 1.64 ± 0.97                 | 0.57 ± 0.29 | 2.28 ± 0.78 | 1.99 ± 0.7  |
| G5  | 0.64 ± 0.39                       | 0.46 ± 0.23 | 3.98 ± 2.33 | 2.4 ± 0.83  | 1.65 ± 0.9                  | 0.46 ± 0.22 | 2 ± 0.6     | 1.84 ± 1.1  |
| G6  | 0.89 ± 0.53                       | 0.44 ± 0.25 | 5.29 ± 2.19 | 2.07 ± 0.97 | 2.07 ± 0.99                 | 0.47 ± 0.27 | 2.3 ± 0.97  | 1.54 ± 0.53 |
| G7  | 1.21 ± 0.49                       | 0.33 ± 0.16 | 3.94 ± 1.7  | 2.44 ± 0.77 | 2 ± 0.9                     | 0.47 ± 0.25 | 1.95 ± 0.93 | 2.02 ± 0.81 |
| G8  | 0.79 ± 0.5                        | 0.29 ± 0.19 | 3.79 ± 1.67 | 2.65 ± 1.19 | 1.73 ± 0.72                 | 0.64 ± 0.3  | 1.95 ± 0.74 | 1.47 ± 0.54 |
| G9  | 0.89 ± 0.38                       | 0.27 ± 0.19 | 3.52 ± 1.76 | 2.4 ± 0.76  | 1.48 ± 0.81                 | 0.39 ± 0.17 | 1.9 ± 0.54  | 1.96 ± 0.85 |
| G10 | 0.77 ± 0.7                        | 0.33 ± 0.14 | 3.94 ± 1.62 | 2.17 ± 0.84 | 1.47 ± 1.05                 | 0.47 ± 0.25 | 1.73 ± 0.8  | 1.79 ± 0.89 |
| G11 | 0.69 ± 0.36                       | 0.25 ± 0.1  | 3.43 ± 1.47 | 2.23 ± 0.99 | 1.77 ± 0.99                 | 0.54 ± 0.35 | 1.75 ± 0.63 | 1.7 ± 0.58  |
| G12 | 0.67 ± 0.62                       | 0.35 ± 0.18 | 3.86 ± 1.27 | 2.41 ± 1.1  | 1.42 ± 0.86                 | 0.57 ± 0.25 | 2.01 ± 0.73 | 1.57 ± 0.59 |
| G13 | 0.64 ± 0.39                       | 0.44 ± 0.45 | 3.36 ± 0.98 | 2.18 ± 0.81 | 1.24 ± 0.53                 | 0.5 ± 0.4   | 1.49 ± 0.56 | 1.6 ± 0.62  |
| G14 | 0.72 ± 0.42                       | 0.32 ± 0.17 | 3.46 ± 1.73 | 2.5 ± 0.85  | 1.52 ± 1.14                 | 0.43 ± 0.2  | 1.6 ± 0.66  | 1.36 ± 0.55 |
| G15 | 0.57 ± 0.39                       | 0.37 ± 0.15 | 3.75 ± 1.33 | 2.42 ± 1.18 | 1.4 ± 1.31                  | 0.53 ± 0.29 | 2.12 ± 0.81 | 1.51 ± 0.5  |
| G16 | 0.87 ± 0.35                       | 0.34 ± 0.14 | 4.82 ± 1.82 | 2.54 ± 0.91 | 1.77 ± 0.96                 | 0.51 ± 0.29 | 1.44 ± 0.66 | 1.91 ± 0.95 |
| G17 | 0.78 ± 0.39                       | 0.33 ± 0.18 | 3.38 ± 1.18 | 2.42 ± 0.97 | 1.21 ± 0.87                 | 0.53 ± 0.24 | 1.65 ± 0.78 | 1.52 ± 0.72 |
| G18 | 0.49 ± 0.38                       | 0.31 ± 0.15 | 3.12 ± 1.56 | 1.77 ± 0.67 | 0.97 ± 0.62                 | 0.55 ± 0.22 | 2.17 ± 0.55 | 1.59 ± 0.67 |
| G19 | 0.52 ± 0.3                        | 0.31 ± 0.2  | 3.22 ± 1.03 | 2.03 ± 0.73 | 1.12 ± 0.63                 | 0.39 ± 0.19 | 1.7 ± 0.56  | 1.58 ± 0.55 |
| G20 | 0.99 ± 0.51                       | 0.29 ± 0.13 | 4.36 ± 1.56 | 2.19 ± 0.96 | 1.13 ± 0.81                 | 0.47 ± 0.22 | 1.6 ± 0.57  | 1.64 ± 0.66 |

|         |             |             |             |            |             |             |            |            |
|---------|-------------|-------------|-------------|------------|-------------|-------------|------------|------------|
| Average | 0.78 ± 0.46 | 0.35 ± 0.19 | 3.96 ± 1.69 | 2.3 ± 0.95 | 1.55 ± 0.87 | 0.49 ± 0.26 | 1.9 ± 0.72 | 1.69 ± 0.7 |
|---------|-------------|-------------|-------------|------------|-------------|-------------|------------|------------|

**Table S7.** Average TPOS of camelina accessions for two growing seasons (2017/18 and 2018/19).

| Total Percentage of Oil in the Seed (TPOS) (%) |              |              |              |              |                             |              |              |              |
|--|--------------|--------------|--------------|--------------|-----------------------------|--------------|--------------|--------------|
| Location 1 (Rimski Šančevi)                    |              |              |              |              | Location 2 (Bački Petrovac) |              |              |              |
|  | Y1A (E1)     | Y1S (E3)     | Y2A (E5)     | Y2S (E7)     | Y1A (E2)                    | Y1S (E4)     | Y2A (E6)     | Y2S (E8)     |
| G1   | 30.51 ± 3.71 | 30.13 ± 2.02 | 26.76 ± 0.87 | 28.13 ± 4.38 | 31.2 ± 1.16                 | 31.8 ± 1.74  | 32.74 ± 1.37 | 28.9 ± 3.63  |
| G2   | 36.4 ± 2.62  | 29.94 ± 3.28 | 29.85 ± 1.9  | 32.46 ± 2.03 | 32.57 ± 1.73                | 28.86 ± 5.91 | 34.68 ± 0.73 | 31.9 ± 1.06  |
| G3   | 36.25 ± 1.07 | 33.84 ± 1.23 | 26.5 ± 4.54  | 32.52 ± 3.46 | 33.85 ± 0.75                | 33.43 ± 2.25 | 34.72 ± 0.78 | 31.51 ± 3.35 |
| G4   | 32.58 ± 1.02 | 30.42 ± 1.25 | 25.08 ± 6.64 | 28.2 ± 5.03  | 31.91 ± 1.19                | 32.13 ± 1.44 | 33.5 ± 0.77  | 29.77 ± 2.73 |
| G5   | 36.57 ± 1.37 | 34.02 ± 1.17 | 26.36 ± 6.1  | 32.17 ± 3.13 | 34.72 ± 1.2                 | 35.1 ± 1.07  | 36.07 ± 0.91 | 33.99 ± 1.86 |
| G6   | 34.6 ± 2.29  | 32.18 ± 0.99 | 27.7 ± 5.05  | 32.45 ± 3.21 | 34.13 ± 1.36                | 33.61 ± 1.48 | 36.95 ± 0.39 | 33.13 ± 1.87 |
| G7   | 37.69 ± 1.58 | 33.56 ± 2.14 | 30.9 ± 4.97  | 32.56 ± 4.64 | 34.89 ± 1.47                | 34.4 ± 0.98  | 37.29 ± 1.49 | 34.52 ± 1.48 |
| G8   | 36.22 ± 0.61 | 32.2 ± 1.88  | 29.28 ± 5.46 | 34.75 ± 2.41 | 34.29 ± 1.3                 | 34.63 ± 0.92 | 36.54 ± 1.22 | 33.11 ± 1.68 |
| G9   | 37.95 ± 2.1  | 31.92 ± 3.04 | 32.74 ± 0.39 | 30.86 ± 4.62 | 35.23 ± 0.96                | 32.55 ± 1.26 | 37.25 ± 0.77 | 34.81 ± 1    |
| G10  | 36.7 ± 2.4   | 32.55 ± 1.86 | 28.39 ± 3.25 | 32.12 ± 4.01 | 33.97 ± 1.28                | 32.79 ± 2.36 | 36.28 ± 0.23 | 34.04 ± 1.33 |
| G11  | 30.13 ± 2.9  | 31.14 ± 0.51 | 30.22 ± 0.62 | 28.46 ± 5.16 | 31.22 ± 2.03                | 31.99 ± 1.18 | 34.25 ± 0.85 | 30.25 ± 1.32 |
| G12  | 33.26 ± 1.74 | 32.04 ± 1.41 | 28.51 ± 3.45 | 30.93 ± 2.86 | 32.78 ± 1.57                | 33.26 ± 1.64 | 34.83 ± 0.65 | 29.94 ± 3.25 |
| G13  | 33.72 ± 2.19 | 30.54 ± 2.06 | 28.3 ± 3.61  | 32.31 ± 2.35 | 31.95 ± 0.84                | 31.21 ± 1.94 | 33.93 ± 0.52 | 31.39 ± 0.95 |
| G14  | 35.4 ± 2.51  | 30.19 ± 1.84 | 29.03 ± 6.56 | 31.56 ± 3.59 | 33.13 ± 0.65                | 32.32 ± 0.85 | 36.47 ± 0.42 | 33.55 ± 0.54 |
| G15  | 34.96 ± 0.24 | 31.02 ± 1.43 | 32.76 ± 2.63 | 32.62 ± 2.67 | 33.89 ± 1.34                | 32.22 ± 1.03 | 36.7 ± 0.3   | 33.3 ± 0.89  |
| G16  | 34.67 ± 3.03 | 31.39 ± 3.49 | 30.09 ± 2.95 | 30.68 ± 2.1  | 32.22 ± 1.24                | 33.79 ± 1.11 | 34.32 ± 0.71 | 31.98 ± 1.72 |
| G17  | 35.45 ± 1.22 | 32.18 ± 0.57 | 29.8 ± 2.3   | 32.23 ± 1.69 | 31.36 ± 1.01                | 32.51 ± 1.45 | 34.71 ± 0.62 | 32.07 ± 1.23 |
| G18  | 30.9 ± 3.01  | 29.09 ± 2.13 | 27.76 ± 1.52 | 28.11 ± 4.3  | 30.51 ± 1.62                | 31.51 ± 1.95 | 32.36 ± 1.06 | 31.85 ± 0.93 |
| G19  | 34.84 ± 2.56 | 30.59 ± 1.95 | 29.08 ± 2.61 | 31.28 ± 1.27 | 32.67 ± 0.95                | 32.39 ± 1.73 | 34.18 ± 0.95 | 32.1 ± 3.06  |
| G20  | 29.67 ± 3.69 | 31.95 ± 0.56 | 28.71 ± 4.38 | 30.75 ± 3.25 | 32.41 ± 1.56                | 33.05 ± 1.2  | 35.31 ± 0.31 | 32.66 ± 0.74 |
| Average  | 34.42 ± 2.09 | 31.54 ± 1.74 | 28.89 ± 3.49 | 31.26 ± 3.31 | 32.94 ± 1.26                | 32.68 ± 1.68 | 35.15 ± 0.75 | 32.24 ± 1.73 |

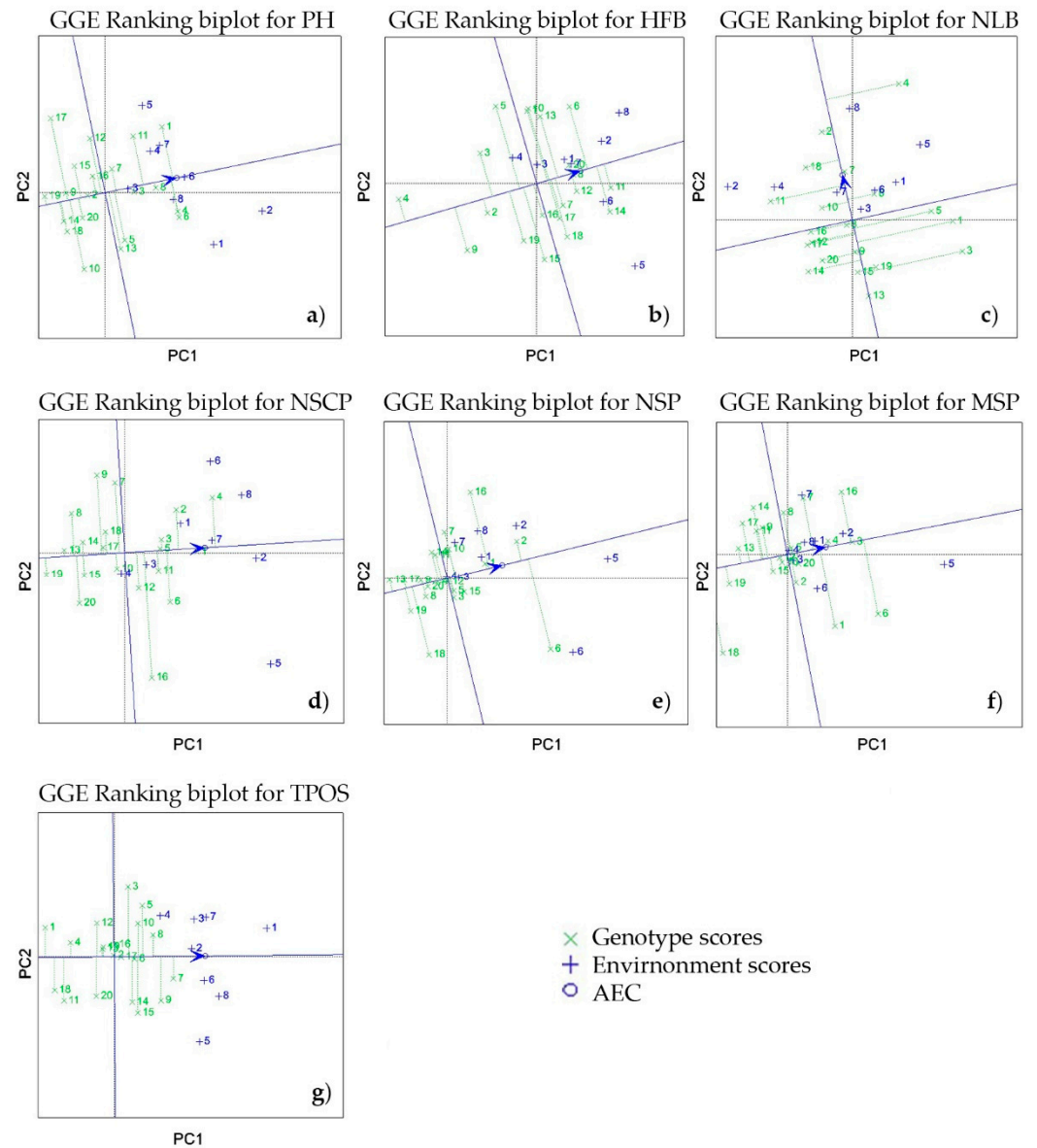
**Table S8.** Ranking of the 20 spring camelina accessions by their average trait means achieved depending on two different sowings dates (autumn and spring).

| Sow-<br>Trait ing<br>dates |   | Ranking of Accessions |     |     |     |     |     |     |      |     |     |     |     |      |     |     |     |      |       |     |     |
|----------------------------|---|-----------------------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|------|-------|-----|-----|
|                            |   | I                     | II  | III | IV  | V   | VI  | VII | VIII | IX  | X   | XI  | XII | XIII | XIV | XV  | XVI | XVII | XVIII | XIX | XX  |
| PH                         | A | G6                    | G4  | G1  | G8  | G11 | G3  | G7  | G13  | G5  | G16 | G12 | G2  | G15  | G18 | G10 | G20 | G9   | G14   | G19 | G17 |
|                            | S | G1                    | G5  | G4  | G13 | G17 | G7  | G11 | G12  | G3  | G8  | G6  | G16 | G9   | G20 | G2  | G10 | G14  | G15   | G18 | G19 |
| HFB                        | A | G11                   | G8  | G18 | G7  | G14 | G12 | G20 | G16  | G17 | G15 | G6  | G13 | G10  | G19 | G1  | G3  | G2   | G5    | G9  | G4  |
|                            | S | G6                    | G5  | G1  | G11 | G13 | G7  | G17 | G12  | G10 | G8  | G14 | G20 | G3   | G2  | G9  | G16 | G15  | G18   | G19 | G4  |
| NLB                        | A | G4                    | G6  | G18 | G2  | G11 | G5  | G7  | G10  | G8  | G1  | G12 | G14 | G20  | G17 | G3  | G13 | G15  | G19   | G9  | G16 |
|                            | S | G4                    | G2  | G16 | G18 | G17 | G7  | G10 | G11  | G12 | G1  | G20 | G8  | G14  | G6  | G15 | G9  | G3   | G19   | G5  | G13 |
| NSC                        | A | G1                    | G6  | G4  | G2  | G5  | G3  | G11 | G16  | G12 | G7  | G18 | G14 | G10  | G17 | G20 | G15 | G9   | G8    | G13 | G19 |
|                            | S | G4                    | G1  | G3  | G16 | G5  | G12 | G11 | G2   | G17 | G7  | G18 | G13 | G9   | G10 | G6  | G15 | G20  | G8    | G14 | G19 |
| NSP                        | A | G6                    | G2  | G1  | G16 | G15 | G7  | G3  | G5   | G10 | G12 | G14 | G11 | G4   | G8  | G20 | G9  | G18  | G17   | G19 | G13 |
|                            | S | G2                    | G16 | G7  | G15 | G12 | G3  | G10 | G17  | G4  | G14 | G11 | G5  | G1   | G9  | G13 | G8  | G6   | G18   | G19 | G20 |
| MSP                        | A | G6                    | G3  | G1  | G4  | G7  | G2  | G16 | G8   | G5  | G20 | G12 | G10 | G15  | G9  | G11 | G14 | G17  | G13   | G18 | G19 |
|                            | S | G3                    | G4  | G7  | G16 | G5  | G8  | G9  | G17  | G12 | G15 | G11 | G10 | G13  | G14 | G2  | G20 | G6   | G1    | G19 | G18 |
| TPOS                       | A | G7                    | G9  | G15 | G8  | G14 | G5  | G6  | G10  | G2  | G3  | G17 | G16 | G19  | G13 | G12 | G20 | G4   | G11   | G18 | G1  |
|                            | S | G7                    | G8  | G5  | G10 | G3  | G6  | G9  | G17  | G15 | G16 | G20 | G14 | G13  | G12 | G19 | G2  | G11  | G4    | G1  | G18 |

A – autumn sowing; S – spring sowing; Ranks I–XX – from best to worst.



**Figure S1.** Presence of Turnip yellow virus (TuYV) in different vegetation periods: (A) Location 1 (Rimski Šančevi) winter sowing of first growing season (2017–2018); (B) Location 2 (Bački Petrovac) spring sowing of second growing season (2018–2019).



**Figure S2.** GGE Ranking biplots for all camelina accessions for each trait for two growing seasons (2017/18 and 2018/19); **a)** GGE Ranking biplot for PH; **b)** GGE Ranking biplot for HFB; **c)** GGE Ranking biplot for NLB; **d)** GGE Ranking biplot for NSCP; **e)** GGE Ranking biplot for NSP; **f)** GGE Ranking biplot for MSP; **g)** GGE Ranking biplot for TPOS.