

Na bazi premera dela sastojine crnog bora u Lipovici, površine  $p=0.1$  ha i poznate starosti od 55 godina:

| N  | d[cm] | h [m] | ld [m] | r1 [m] | r2 [m] | r3 [m] | r4 [m] | B.P. | N    | d[cm]  | h [m] | ld [m] | r1 [m] | r2 [m] | r3 [m] | r4 [m] | B.P. |
|----|-------|-------|--------|--------|--------|--------|--------|------|------|--------|-------|--------|--------|--------|--------|--------|------|
| 1  | 26    |       |        |        |        |        |        | 1    | 45   | 21     |       |        |        |        |        |        | 3    |
| 2  | 26.7  |       |        |        |        |        |        | 1    | 46   | 25.7   |       |        | 1.4    | 1.7    | 2.6    | 2.2    | 1    |
| 3  | 22.6  |       |        | 1.6    | 2.4    | 1.9    | 1.8    | 1    | 47   | 25.5   | 18    | 13.1   | 1.6    | 1.8    | 1.3    | 2.8    | 2    |
| 4  | 18.4  |       |        |        |        |        |        | 1    | 48   | 29.7   | 19.1  | 13.3   | 3.1    | 2.4    | 1.9    | 2      | 2    |
| 5  | 27.9  |       |        | 1.7    | 2      | 1.2    | 2.9    | 1    | 49   | 22.7   | 18.2  | 14     |        |        |        |        | 1    |
| 6  | 32.2  | 23    |        | 1.2    | 2.2    | 2      | 3.2    | 1    | 50   | /      |       |        |        |        |        |        | /    |
| 7  | 29    | 18    |        |        |        |        |        | 1    | 51   | 22.5   |       |        |        |        |        |        | 3    |
| 8  | 21.5  |       |        |        |        |        |        | 2    | 52   | 18.8   |       |        |        |        |        |        | 3    |
| 9  | 19.1  |       |        |        |        |        |        | 1    | 53   | 19     |       |        |        |        |        |        | 2    |
| 10 | 19    |       |        |        |        |        |        | 2    | 54   | 17.6   |       |        |        |        |        |        | 1    |
| 11 | 22.7  |       |        |        |        |        |        | 2    | 55   | 22.6   |       |        |        |        |        |        | 3    |
| 12 | 22.1  |       |        |        |        |        |        | 1    | 56   | /      |       |        |        |        |        |        | /    |
| 13 | 21.8  |       |        |        |        |        |        | 2    | 57   | 25.4   |       |        |        |        |        |        | 1    |
| 14 | 28    |       |        |        |        |        |        | 1    | 58   | 30.3   | 20.1  | 14.3   | 2.9    | 2.1    | 1.5    | 3.7    | 2    |
| 15 | 29.9  | 19.2  | 14     | 1.7    | 1.5    | 2.7    | 3.4    | 1    | 59   | 25.8   |       |        | 2.1    | 1.7    | 1.7    | 2.1    | 2    |
| 16 | 20.1  |       |        |        |        |        |        | 2    | 60   | 30.8   | 22.1  | 14.4   | 2.1    | 2.5    | 2.1    | 2.7    | 1    |
| 17 | 30.5  | 21.3  |        | 1.8    | 1.7    | 2.2    | 2.5    | 2    | 61   | 25.1   | 21.2  | 13.2   | 1.3    | 1.9    | 2.2    | 2.6    | 3    |
| 18 | 27.3  | 18.7  | 14.3   | 2      | 2      | 1.9    | 1.6    | 2    | 62   | 21.6   |       |        | 2.5    | 1.5    | 0.8    | 1.7    | 1    |
| 19 | 16.7  | 18    | 14.3   |        |        |        |        | 2    | 63   | 28.8   | 22    | 13.8   | 2.1    | 1.6    | 1.6    | 2.7    | 1    |
| 20 | 24.5  |       |        | 2.2    | 1.6    | 1.9    | 1.7    | 1    | 64   | 18.2   |       |        |        |        |        |        | 1    |
| 21 | 22.8  |       |        |        |        |        |        | 1    | 65   | 26.1   | 21.4  | 14.4   |        |        |        |        | 2    |
| 22 | 22    |       |        |        |        |        |        | 1    | 66   | 30.8   | 22.8  | 14.9   | 2.1    | 2.1    | 2      | 3.2    | 2    |
| 23 | 27.7  |       |        | 2.1    | 1.2    | 2.5    | 2.1    | 1    | 67   | 27.2   | 19.9  | 13     | 1.9    | 1.7    | 2.4    | 3.3    | 1    |
| 24 | 16.2  |       |        |        |        |        |        | 3    | 68   | 25.9   | 21    | 14.5   |        |        |        |        | 3    |
| 25 | 20.4  |       |        |        |        |        |        | 2    | 69   | 29.4   | 20.1  | 13.5   |        |        |        |        | 3    |
| 26 | 13.2  |       |        |        |        |        |        | 2    | 70   | 21.3   | 19.6  | 14.1   |        |        |        |        | 3    |
| 27 | 20    |       |        |        |        |        |        | 2    | 71   | 20.6   | 18.5  | 12.9   |        |        |        |        | 1    |
| 28 | 33.1  | 23.1  |        | 2.1    | 2.2    | 2.6    | 3.5    | 1    | 72   | 24.5   | 19.1  | 13     | 2.1    | 1.6    | 2.8    | 1.9    | 2    |
| 29 | 21.9  |       |        |        |        |        |        | 1    | 73   | /      |       |        |        |        |        |        | /    |
| 30 | 36.8  | 23.9  |        |        |        |        |        | 1    | 74   | 23.5   | 18.2  | 12.4   |        |        |        |        | 1    |
| 31 | 25.1  | 21.8  | 14     |        |        |        |        | 2    | 75   | 27.8   | 17.3  |        |        |        |        |        | 2    |
| 32 | 24.3  | 22    | 14.9   |        |        |        |        | 1    | 76   | 35.8   | 23.5  |        |        |        |        |        | 3    |
| 33 | 30.6  | 21.1  | 15.1   |        |        |        |        | 2    | 77   | 26.7   |       |        |        |        |        |        | 1    |
| 34 | 12.3  | 17.6  | 14.2   |        |        |        |        | 3    | 78   | /      |       |        |        |        |        |        | /    |
| 35 | 22.5  |       |        |        |        |        |        | 2    | 79   | 26.3   |       |        |        |        |        |        | 2    |
| 36 | 24.2  |       |        |        |        |        |        | 2    | 80   | 16.8   |       |        |        |        |        |        | 1    |
| 37 | 27.6  |       |        |        |        |        |        | 1    | 81   | 31.8   | 22.4  |        | 2.9    | 2.8    | 1.9    | 3.9    | 1    |
| 38 | /     |       |        |        |        |        |        | /    | 82   | 24.1   |       |        |        |        |        |        | 1    |
| 39 | 19.1  | 16.2  | 12.6   |        |        |        |        | 1    | 83   | 22.7   |       |        |        |        |        |        | 3    |
| 40 | 27    |       |        | 2.4    | 1.1    | 2.4    | 2.9    | 1    | 84   | 22.8   |       |        |        |        |        |        | 3    |
| 41 | 24.9  |       |        | 2.1    | 1.8    | 1.5    | 2.5    | 1    | 85   | 28.7   | 19    |        | 2      | 1.9    | 3.1    | 2.8    | 3    |
| 42 | 26.1  |       |        | 2      | 1.5    | 1.9    | 3.3    | 2    | 86   | 19.9   | 18.7  | 13     |        |        |        |        | 1    |
| 43 | 28.1  | 17.8  |        | 2.6    | 2.1    | 1.4    | 3.5    | 2    | 87   | 23.2   |       |        | 1.5    | 1.4    | 1.8    | 2.5    | 1    |
| 44 | 24.4  |       |        | 1.7    | 1.1    | 2.5    | 2.4    | 2    | Suma | 2003.3 |       |        |        |        |        |        |      |

**Odrediti i analizirati sledeće elemente rasta i sastojinske izgrađenosti i po potrebi ih grafički predstaviti:**  
**1. Srednje prečnike i visine;**

1.1. Aritmetički srednji prečnik:

$$\bar{d} = \frac{1}{n} \sum_1^n d =$$

1.2. Srednji prečnik po temeljnici:

$$d_g = \sqrt{\frac{\sum_1^n d^2}{n}} = \sqrt{\frac{\sum_1^n 50780.33}{n}} =$$

1.3. Srednji prečnik dominantnih stabala po temeljnici:

$$D_g = \sqrt{\frac{\sum_1^n D_{20\%}^2}{n_{20\%}}} =$$

1.4. Aritmetička srednja visina:

$$\bar{h} = \frac{1}{n} \sum_1^n h =$$

1.5. Srednja visina dominantnih stabala:

$$H_g = \sqrt{\frac{\sum_1^n H_{20\%}^2}{n_{20\%}}} =$$

1.6. Visinsku krivu i krivu visina početka krošnje:

*redova      60x65      kolona*

