

# Zadatak 10 - No. 18 Mijatovic Nemanja

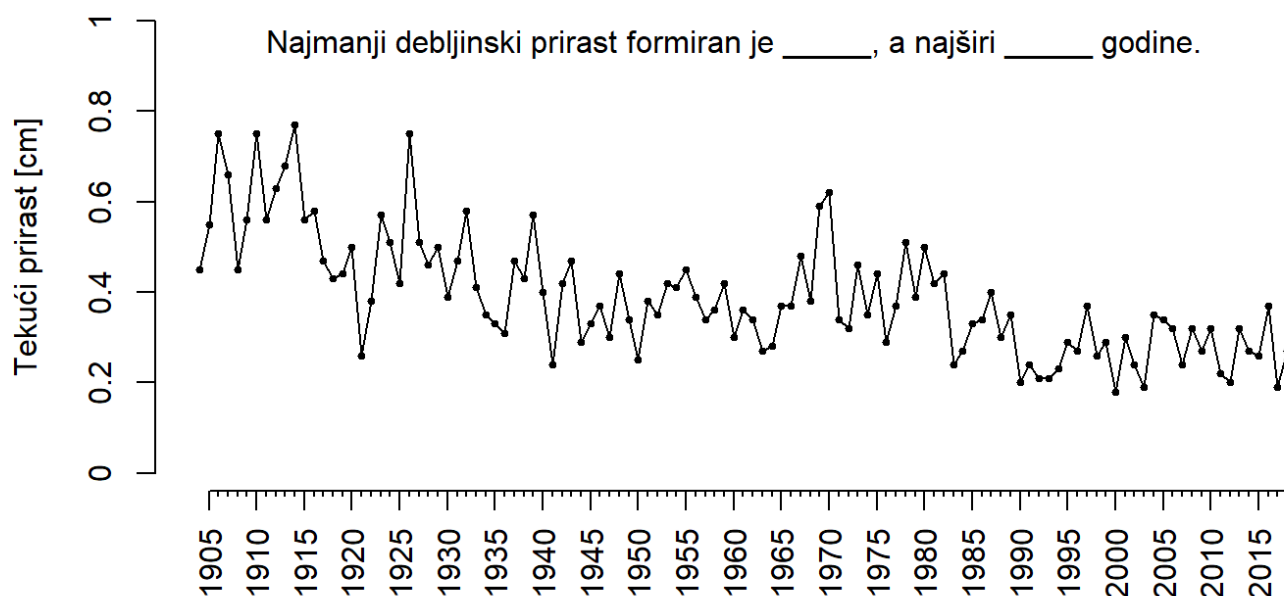
Vežbe - Rast i proizvodnost šuma 2023

markokazimirovic.shinyapps.io/Zadatak10/



Premerom 15 koturova stabala hrasta lužnjaka, utvrđeni su prosečni iznosi godišnjeg debljinskog prirasta na analiziranom lokalitetu u Bojčinskoj šumi. Na osnovu datih prosečnih podataka, utvrditi prečnike u petogodišnjim intervalima i grafički predstaviti rast prečnika. Koristeći metod najmanjih kvadrata, postupno izračunati parametre stepene funkcije. Na osnovu kalibrisanog modela, utvrditi iznose prečnika za analizirane petogodišnje periode, a zatim dobijene iznose iskoristiti za dodavanje linije regresije na grafikonu i određivanje standardne greške regresije.

| N  | T    | id   | N  | t    | id   | N  | T    | id   | N  | T    | id   | N  | T    | id   | N  | T    | id   | N   | T    | id   | N   | T    | id   |
|----|------|------|----|------|------|----|------|------|----|------|------|----|------|------|----|------|------|-----|------|------|-----|------|------|
| 1  | 1904 | 0.45 | 16 | 1919 | 0.44 | 31 | 1934 | 0.35 | 46 | 1949 | 0.34 | 61 | 1964 | 0.28 | 76 | 1979 | 0.39 | 91  | 1994 | 0.23 | 106 | 2009 | 0.27 |
| 2  | 1905 | 0.55 | 17 | 1920 | 0.50 | 32 | 1935 | 0.33 | 47 | 1950 | 0.25 | 62 | 1965 | 0.37 | 77 | 1980 | 0.50 | 92  | 1995 | 0.29 | 107 | 2010 | 0.32 |
| 3  | 1906 | 0.75 | 18 | 1921 | 0.26 | 33 | 1936 | 0.31 | 48 | 1951 | 0.38 | 63 | 1966 | 0.37 | 78 | 1981 | 0.42 | 93  | 1996 | 0.27 | 108 | 2011 | 0.22 |
| 4  | 1907 | 0.66 | 19 | 1922 | 0.38 | 34 | 1937 | 0.47 | 49 | 1952 | 0.35 | 64 | 1967 | 0.48 | 79 | 1982 | 0.44 | 94  | 1997 | 0.37 | 109 | 2012 | 0.2  |
| 5  | 1908 | 0.45 | 20 | 1923 | 0.57 | 35 | 1938 | 0.43 | 50 | 1953 | 0.42 | 65 | 1968 | 0.38 | 80 | 1983 | 0.24 | 95  | 1998 | 0.26 | 110 | 2013 | 0.32 |
| 6  | 1909 | 0.56 | 21 | 1924 | 0.51 | 36 | 1939 | 0.57 | 51 | 1954 | 0.41 | 66 | 1969 | 0.59 | 81 | 1984 | 0.27 | 96  | 1999 | 0.29 | 111 | 2014 | 0.27 |
| 7  | 1910 | 0.75 | 22 | 1925 | 0.42 | 37 | 1940 | 0.40 | 52 | 1955 | 0.45 | 67 | 1970 | 0.62 | 82 | 1985 | 0.33 | 97  | 2000 | 0.18 | 112 | 2015 | 0.26 |
| 8  | 1911 | 0.56 | 23 | 1926 | 0.75 | 38 | 1941 | 0.24 | 53 | 1956 | 0.39 | 68 | 1971 | 0.34 | 83 | 1986 | 0.34 | 98  | 2001 | 0.30 | 113 | 2016 | 0.37 |
| 9  | 1912 | 0.63 | 24 | 1927 | 0.51 | 39 | 1942 | 0.42 | 54 | 1957 | 0.34 | 69 | 1972 | 0.32 | 84 | 1987 | 0.40 | 99  | 2002 | 0.24 | 114 | 2017 | 0.19 |
| 10 | 1913 | 0.68 | 25 | 1928 | 0.46 | 40 | 1943 | 0.47 | 55 | 1958 | 0.36 | 70 | 1973 | 0.46 | 85 | 1988 | 0.30 | 100 | 2003 | 0.19 | 115 | 2018 | 0.27 |
| 11 | 1914 | 0.77 | 26 | 1929 | 0.50 | 41 | 1944 | 0.29 | 56 | 1959 | 0.42 | 71 | 1974 | 0.35 | 86 | 1989 | 0.35 | 101 | 2004 | 0.35 |     |      |      |
| 12 | 1915 | 0.56 | 27 | 1930 | 0.39 | 42 | 1945 | 0.33 | 57 | 1960 | 0.30 | 72 | 1975 | 0.44 | 87 | 1990 | 0.20 | 102 | 2005 | 0.34 |     |      |      |
| 13 | 1916 | 0.58 | 28 | 1931 | 0.47 | 43 | 1946 | 0.37 | 58 | 1961 | 0.36 | 73 | 1976 | 0.29 | 88 | 1991 | 0.24 | 103 | 2006 | 0.32 |     |      |      |
| 14 | 1917 | 0.47 | 29 | 1932 | 0.58 | 44 | 1947 | 0.30 | 59 | 1962 | 0.34 | 74 | 1977 | 0.37 | 89 | 1992 | 0.21 | 104 | 2007 | 0.24 |     |      |      |
| 15 | 1918 | 0.43 | 30 | 1933 | 0.41 | 45 | 1948 | 0.44 | 60 | 1963 | 0.27 | 75 | 1978 | 0.51 | 90 | 1993 | 0.21 | 105 | 2008 | 0.32 |     |      |      |



$$y = a \cdot x^b$$

| Br.  | t   | d |  |  |  |  |  |  |
|------|-----|---|--|--|--|--|--|--|
| 1    | 15  |   |  |  |  |  |  |  |
| 2    | 25  |   |  |  |  |  |  |  |
| 3    | 35  |   |  |  |  |  |  |  |
| 4    | 45  |   |  |  |  |  |  |  |
| 5    | 55  |   |  |  |  |  |  |  |
| 6    | 65  |   |  |  |  |  |  |  |
| 7    | 75  |   |  |  |  |  |  |  |
| 8    | 85  |   |  |  |  |  |  |  |
| 9    | 95  |   |  |  |  |  |  |  |
| 10   | 105 |   |  |  |  |  |  |  |
| 11   | 115 |   |  |  |  |  |  |  |
| Suma |     |   |  |  |  |  |  |  |

*redova*    30x65    *kolona*

