Supplementary material

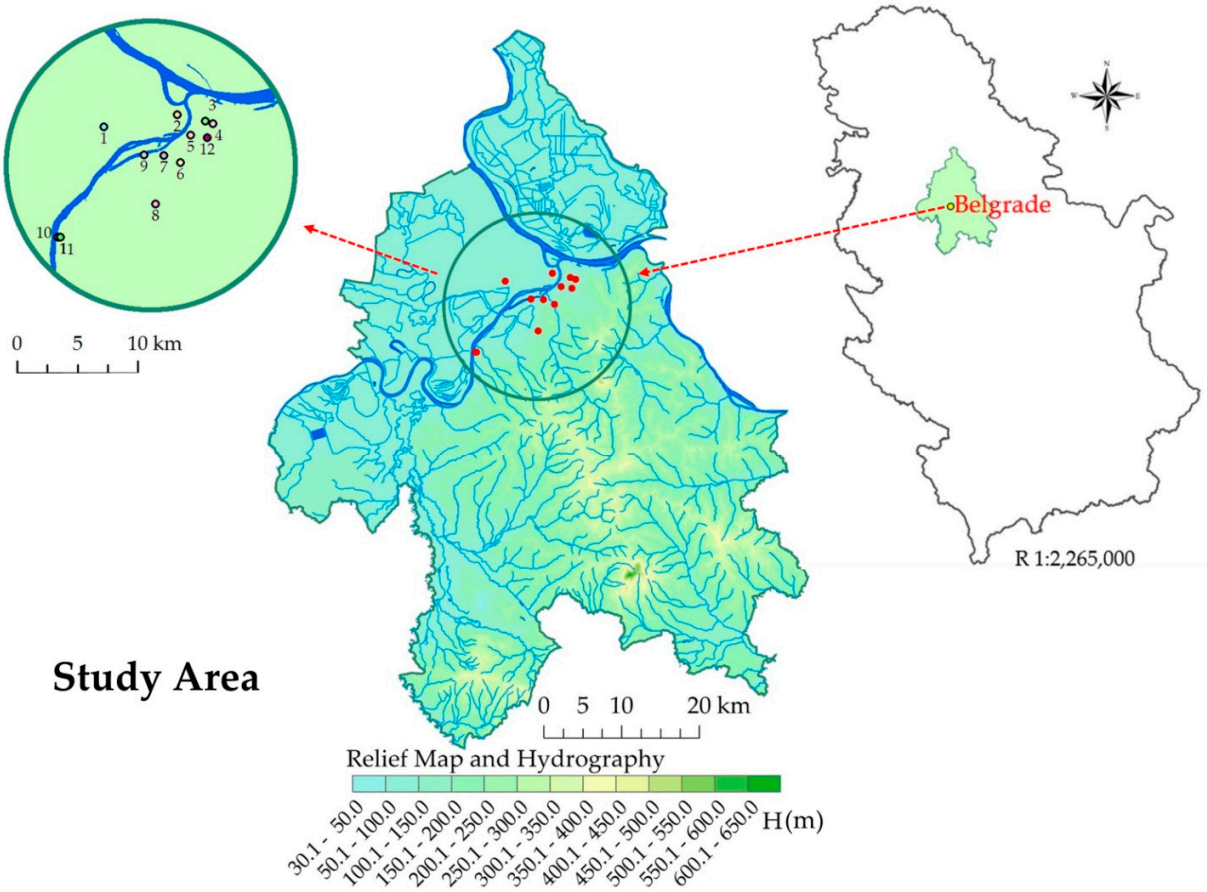

Figure S1. Location of the study area.

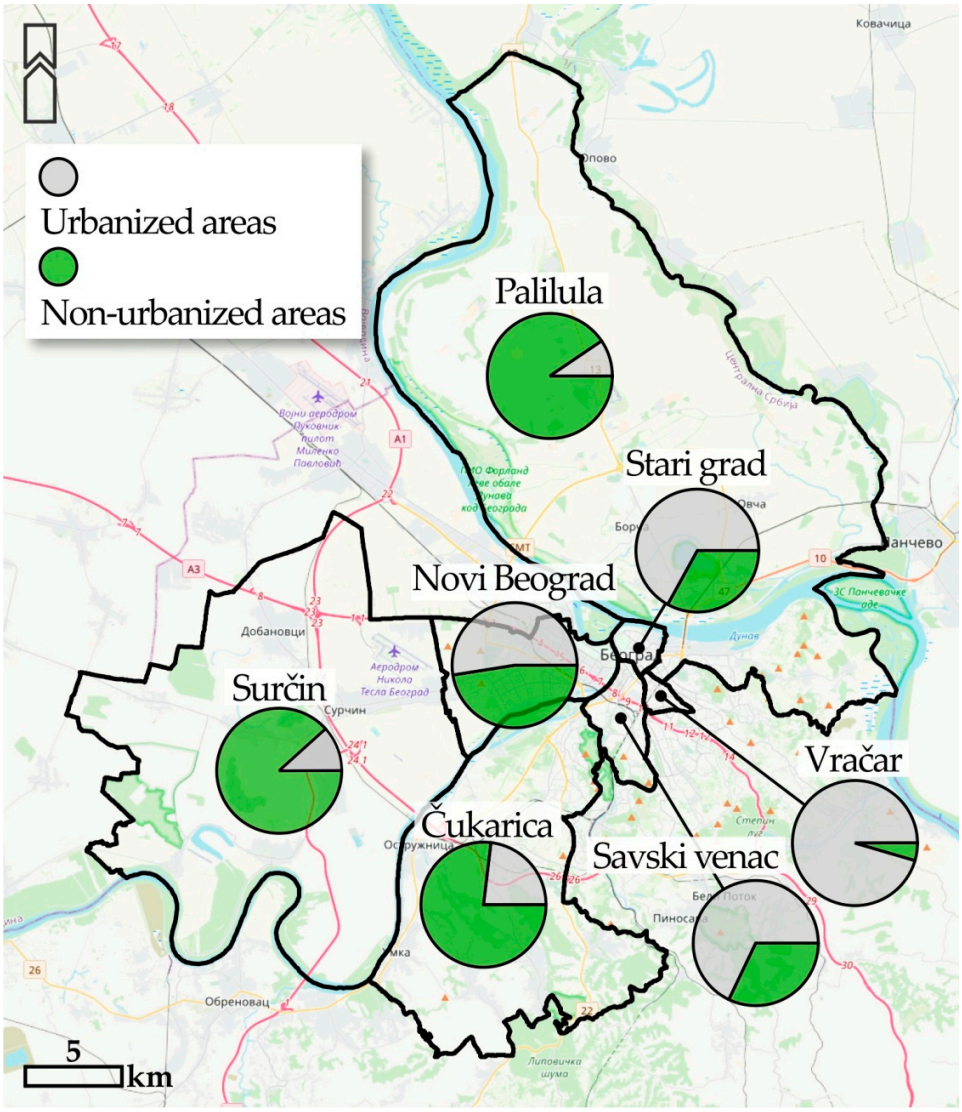

Figure S1a. The degree of urbanization by municipalities

Table S1. Description of the study areas.

Location	Latitude ϕ	Longitude λ	Altitude H (m)	Soil type WRB*	Aspect	Origin
1.	44º 48' 20.20 " N	20º 21' 31.44" E	Gr 101	Luvic Chernozems	-	Planted
2.	44º 48' 54.34" N	20º 26' 07.57" E	Gr 72	Haplic Fluvisol (Eutric, Siltic)	-	Planted
3.	44º 48' 37.59" N	20º 27' 52.93" E	Gr 118	Haplic Cambisol (Eutric)	-	Planted
4.	44º 48' 30.10" N	20º 28' 22.65" E	Gr 120	Haplic Cambisol (Eutric)	-	Planted
5.	44º 47' 58.87" N	20º 26' 58.43" E	Gr 74	Haplic Fluvisol (Eutric, Siltic)	W	Planted

6.	44º 46' 44.92" N 20º 26' 20.75" EGr	77	Haplic Fluvisol (Siltic)	NE	Planted
7.	44º 47' 04.24" N 20º 25' 16.59" EGr	87	Luvic Chernozems	NW	Planted
8.	44º 44' 53.48" N 20º 24' 46.93" EGr	145	Haplic Cambisol (Eutric)	NW	Wild
9.	44º 47' 05.58" N 20º 24' 02.89" EGr	74	Haplic Fluvisol (Siltic)	-	Planted
10.	44º 43' 22.16" N 20º 18' 41.03" EGr	76	Haplic Fluvisol (Siltic)	SW	Wild
11.	44º 43' 22.28" N 20º 18' 47.80" EGr	91	Colluvic Regosol	SW	Planted
12.	44º 47' 52.34" N 20º 28' 01.44" EGr	128	Haplic Cambisol (Eutric)	-	Planted

*IUSS WORKING GROUP WRB 2015. World Reference Base for Soil Resources 2014, update 2015. International soil classification system for naming soils and creating legends for soil maps.World Soil Resources Reports No. 106. FAO, Rome

Table S2. Climate variables for 2022, referential period 1991-2020 and previous time series: 1981-2010, 1971-2000 and 1961-1990, for the station Belgrade.

Mean air temperature (°C)													
Months Period	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	$\bar{x}$
$\bar{x}$ **2022**	2.4	6.8	7.1	12.3	20.3	24.8	25.8	25.0	18.0	15.5	9.3	7.0	**14.5**
$\bar{x}$ **91/2020**	1.9	3.8	8.3	13.6	18.2	21.9	23.8	23.8	18.5	13.3	8.1	3.0	**13.2**
$\bar{x}$ **81/2010**	1.4	3.1	7.6	12.9	18.1	21.0	23.0	22.7	18.0	12.9	7.1	2.7	**12.5**
$\bar{x}$ **71/2000**	1.3	3.1	7.5	12.3	17.5	20.4	22.1	21.9	17.6	12.3	6.5	2.7	**12.1**
$\bar{x}$ **61/1990**	0.4	2.8	7.2	12.4	17.2	20.1	21.7	21.3	17.7	12.5	7.0	2.4	**11.9**
Mean maximum air temperature (°C)													
$\bar{x}$ **2022**	6.2	11.8	12.2	17.9	26.1	30.2	31.7	30.8	23.6	21.5	13.0	11.2	**19.7**
$\bar{x}$ **91/2020**	5.2	7.8	13.1	18.8	23.6	27.1	29.3	29.7	24.3	18.7	12.2	6.1	**18.0**
$\bar{x}$ **81/2010**	4.6	6.9	12.4	18.0	23.5	26.2	28.6	28.7	23.9	18.4	11.2	5.8	**17.4**
$\bar{x}$ **71/2000**	4.4	7.0	12.3	17.4	22.8	25.6	27.7	27.8	23.6	17.7	10.3	5.9	**16.9**
$\bar{x}$ **61/1990**	3.5	6.5	11.9	17.5	22.5	25.3	27.3	27.3	23.7	18.1	11.0	5.3	**16.6**
Mean minimum air temperature (°C)													
$\bar{x}$ **2022**	-0.4	3.4	2.2	6.9	14.4	18.9	19.5	19.7	14.2	11.2	6.7	4.2	**10.1**
$\bar{x}$ **91/2020**	-0.7	0.6	4.2	8.8	13.2	16.7	18.4	18.5	14.1	9.4	5.1	0.5	**9.1**
$\bar{x}$ **81/2010**	-1.1	-0.1	3.7	8.3	13.0	15.8	17.5	17.6	13.5	9.0	4.2	0.2	**8.5**
$\bar{x}$ **71/2000**	-1.3	0.0	3.5	7.8	12.4	15.3	16.7	16.8	13.1	8.4	3.6	0.2	**8.0**
$\bar{x}$ **61/1990**	-2.3	-0.2	3.3	7.8	12.1	15.0	16.3	16.1	13.0	8.3	4.0	-0.2	**7.8**
Mean relative humidity (%)													

$\bar{x}$	**2022**	76.1	67.8	55.2	62.0	52.1	55.3	50.5	62.9	74.7	72.5	84.7	74.8	**65.7**
$\bar{x}$	**91/2020**	78.4	72.0	63.5	60.5	62.3	62.8	60.2	59.9	66.2	71.8	75.7	79.9	**67.8**
$\bar{x}$	**81/2010**	77.9	71.2	63.3	60.8	60.9	63.3	61.0	61.4	67.3	71.2	75.4	79.0	**67.7**
$\bar{x}$	**71/2000**	77.8	71.4	63.4	61.7	62.4	64.1	62.6	63.1	68.7	71.6	76.8	78.8	**68.5**
$\bar{x}$	**61/1990**	78.3	73.4	65.2	61.5	63.4	65.3	63.0	64.2	68.2	70.3	76.3	79.9	**69.1**

Sums and mean precipitation sums (mm)

Period		1	2	3	4	5	6	7	8	9	10	11	12	∑
	2022	45.7	22.2	10.5	80.1	32.2	43.3	63.9	89.7	98.0	13.1	64.9	76.1	**639.7**
$\bar{x}$	**91/2020**	47.9	43.5	48.7	51.5	72.3	95.6	66.6	55.1	58.6	54.8	49.6	54.8	**698.8**
$\bar{x}$	**81/2010**	46.9	40.0	49.3	56.1	58.0	101.2	63.0	58.3	55.3	50.2	55.1	57.4	**691.0**
$\bar{x}$	**71/2000**	44.0	38.4	45.4	60.1	67.5	95.4	68.9	57.1	55.0	50.5	54.0	51.8	**688.1**
$\bar{x}$	**61/1990**	49.4	44.4	49.5	58.8	70.7	90.4	66.5	51.2	51.4	40.3	54.3	57.5	**684.4**

Sums and mean of sunshine duration (h)

	2022	123.2	133.0	217.3	213.7	290.4	324.3	339.3	257.0	172.6	205.4	73.8	88.2	**2438.2**
$\bar{x}$	**91/2020**	78.6	106.9	163.0	200.0	240.7	272.0	298.7	281.3	206.4	166.1	102.3	67.0	**2183.1**
$\bar{x}$	**81/2010**	72.2	101.7	153.2	188.1	242.2	260.9	290.8	274.0	204.3	163.1	97.0	64.5	**2111.9**
$\bar{x}$	**71/2000**	73.7	99.8	152.8	179.1	231.2	252.1	281.4	266.9	202.6	160.9	87.7	71.1	**2059.3**
$\bar{x}$	**61/1990**	71.4	88.0	142.8	177.5	226.0	245.1	284.3	265.9	203.2	168.3	89.1	63.0	**2024.7**

Sums and average number of days with precipitation ≥ 0.1 mm

	2022	9	11	6	15	6	6	4	10	15	5	13	15	**115**
$\bar{x}$	**91/2020**	13.5	12.3	11.3	12.4	13.5	12.2	10.0	8.4	9.5	10.5	10.8	13.8	**138.3**
$\bar{x}$	**81/2010**	13.1	11.8	11.2	12.9	13.2	13.1	9.7	8.9	9.5	10.1	11.5	14.2	**139.3**
$\bar{x}$	**71/2000**	12.5	11.3	11.2	13.2	13.8	13.5	10.1	9.3	9.6	9.7	12.0	12.9	**139.2**
$\bar{x}$	**61/1990**	13.3	12.2	11.8	12.7	13.5	13.8	9.9	8.9	9.0	8.2	12.1	13.7	**139.1**

Sums and average number of days with precipitation ≥ 1.0 mm

	2022	8	7	3	12	5	4	2	8	10	2	10	10	**81**
$\bar{x}$	**91/2020**	8.0	7.0	7.4	8.0	9.4	9.4	6.6	6.3	6.8	6.8	7.0	8.2	**91.0**
$\bar{x}$	**81/2010**	7.7	6.5	7.4	8.7	9.0	9.7	6.5	6.5	6.6	6.6	7.4	8.9	**91.4**
$\bar{x}$	**71/2000**	7.5	6.4	7.3	9.0	9.5	9.5	6.8	6.8	6.7	6.6	7.9	8.1	**92.3**
$\bar{x}$	**61/1990**	8.1	7.4	7.9	9.1	9.9	9.8	7.2	6.4	6.3	5.7	8.6	9.0	**95.3**

Table S3. Climate variables for 2022, referential period 1991-2020 and previous time series: 1981-2010, 1971-2000 and 1961-1990 for the station Surčin.

Mean air temperature (°C)													
Months Period	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	$\bar{x}$
$\bar{x}$ **2022**	1.8	6.2	6.1	11.8	19.6	24.0	25.0	24.3	17.4	14.6	8.7	6.4	**13.8**
$\bar{x}$ **91/2020**	1.0	3.0	7.5	12.9	17.6	21.4	23.2	23.2	18.0	12.8	7.4	2.2	**12.5**
$\bar{x}$ **81/2010**	0.5	2.2	6.9	12.2	17.5	20.5	22.5	22.2	17.6	12.5	6.4	1.9	**11.9**
$\bar{x}$ **71/2000**	0.4	2.3	6.7	11.6	16.8	19.9	21.6	21.5	17.3	11.8	5.8	1.9	**11.5**
$\bar{x}$ **61/1990**	-0.7	2.0	6.5	11.5	16.7	19.6	21.4	21.0	17.4	11.9	6.2	1.6	**11.3**
Mean maximum air temperature (°C)													
$\bar{x}$ **2022**	5.2	11.3	11.7	17.2	25.4	29.7	31.3	30.5	22.9	20.7	12.5	10.5	**19.1**
$\bar{x}$ **91/2020**	1.0	3.0	7.5	12.9	17.6	21.4	23.2	23.2	18.0	12.8	7.4	2.2	**12.5**
$\bar{x}$ **81/2010**	0.5	2.2	6.9	12.2	17.5	20.5	22.5	22.2	17.6	12.5	6.4	1.9	**11.9**
$\bar{x}$ **71/2000**	0.4	2.3	6.7	11.6	16.8	19.9	21.6	21.5	17.3	11.8	5.8	1.9	**11.5**
$\bar{x}$ **61/1990**	-0.7	2.0	6.5	11.5	16.7	19.6	21.4	21.0	17.4	11.9	6.2	1.6	**11.3**
Mean minimum air temperature (°C)													
$\bar{x}$ **2022**	-1.4	1.7	0.5	5.9	12.8	17.3	17.7	18.5	13.0	9.4	5.5	2.9	**8.7**
$\bar{x}$ **91/2020**	1.0	3.0	7.5	12.9	17.6	21.4	23.2	23.2	18.0	12.8	7.4	2.2	**12.5**
$\bar{x}$ **81/2010**	0.5	2.2	6.9	12.2	17.5	20.5	22.5	22.2	17.6	12.5	6.4	1.9	**11.9**
$\bar{x}$ **71/2000**	0.4	2.3	6.7	11.6	16.8	19.9	21.6	21.5	17.3	11.8	5.8	1.9	**11.5**
$\bar{x}$ **61/1990**	-0.7	2.0	6.5	11.5	16.7	19.6	21.4	21.0	17.4	11.9	6.2	1.6	**11.3**
Mean relative humidity (%)													
$\bar{x}$ **2022**	77.8	68.3	55.0	64.0	54.2	57.8	50.5	63.4	76.7	75.0	89.0	80.7	**67.7**
$\bar{x}$ **91/2020**	85.0	78.0	68.8	64.9	66.2	66.4	63.1	62.5	68.8	74.6	79.9	85.3	**72.0**
$\bar{x}$ **81/2010**	85.7	79.1	70.3	67.0	65.9	68.1	65.0	64.8	70.6	74.9	81.4	85.8	**73.2**
$\bar{x}$ **71/2000**	85.0	79.2	70.0	67.7	67.5	68.6	65.7	66.1	71.4	75.0	82.7	85.5	**73.7**
$\bar{x}$ **61/1990**	84.7	80.1	71.2	67.3	67.5	69.1	65.8	66.7	70.7	73.4	81.6	85.8	**73.7**

Sums and mean precipitation sums (mm)														
Period		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	∑
	2022	27.1	17.8	8.2	74.4	32.1	51.3	68.9	59.3	161.0	15.3	64.0	68.3	**647.7**
$\bar{x}$	**91/2020**	42.4	34.0	41.7	47.4	68.1	80.1	58.2	54.0	56.0	50.7	45.5	48.3	**626.4**
$\bar{x}$	**81/2010**	42.1	30.9	44.5	54.3	53.5	95.1	58.2	63.3	53.9	47.8	53.6	50.4	**647.6**
$\bar{x}$	**71/2000**	36.6	32.1	40.4	55.8	64.1	91.0	61.0	65.1	53.9	48.5	52.1	45.2	**645.7**
$\bar{x}$	**61/1990**	39.6	35.9	42.9	54.6	61.7	96.0	62.9	61.0	48.8	39.1	51.9	47.2	**641.6**
Sums and mean of sunshine duration (h)														
	2022	121.0	130.2	219.3	193.2	-	-	-	-	-	-	-	-	**-**
$\bar{x}$	**91/2020**	64.3	91.6	155.0	184.2	225.1	251.2	290.3	274.5	199.3	152.1	92.3	52.5	**2032.5**
$\bar{x}$	**81/2010**	58.5	89.1	147.6	173.6	226.8	240.0	280.7	258.9	199.1	148.9	86.0	47.0	**1956.0**
$\bar{x}$	**71/2000**	58.8	88.1	147.2	162.4	213.3	227.9	264.2	243.6	200.7	145.9	74.9	50.2	**1877.3**
$\bar{x}$	**61/1990**	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Sums and average number of days with precipitation ≥ 0.1 mm														
	2022	10	11	6	17	7	8	4	13	17	5	12	16	**126**
$\bar{x}$	**91/2020**	12.4	11.0	10.5	11.6	13.0	11.6	9.6	8.0	9.3	10.0	10.2	12.7	**129.9**
$\bar{x}$	**81/2010**	11.9	10.3	10.4	12.2	11.9	12.6	9.5	8.5	8.8	9.6	10.7	12.7	**129.1**
$\bar{x}$	**71/2000**	11.1	10.1	10.2	12.4	12.2	12.9	10.0	8.9	8.8	9.2	11.3	11.6	**128.7**
$\bar{x}$	**61/1990**	12.3	11.2	10.8	12.3	12.4	13.4	9.6	8.7	8.5	7.8	12.0	12.1	**131.2**
Sums and average number of days with precipitation ≥ 1.0 mm														
	2022	5	6	3	11	4	5	2	8	9	2	8	10	**73**
$\bar{x}$	**91/2020**	7.8	6.9	6.7	7.5	9.2	9.0	6.9	5.7	6.6	6.9	7.0	8.0	**87.9**
$\bar{x}$	**81/2010**	7.5	6.3	6.6	8.1	8.3	9.7	6.7	6.0	6.4	6.5	7.6	8.7	**88.3**
$\bar{x}$	**71/2000**	6.9	5.9	6.4	8.8	8.9	9.7	6.9	6.5	6.5	6.7	8.0	7.8	**88.9**
$\bar{x}$	**61/1990**	7.4	6.6	6.9	9.1	8.9	10.2	7.1	6.2	5.9	5.9	8.0	8.3	**90.4**

Table S4. Climate variables for 2022, for the reference period 1991-2020 and previous time series: 1981-2010, 1971-2000 and 1961-1990 for stations Belgrade and Surčin by season.

Station	**Belgrade**				**Surčin**			
Season	**Spring**	**Summer**	**Autumn**	**Winter**	**Spring**	**Summer**	**Autumn**	**Winter**
Period	**3-5**	**6-8**	**9-10**	**12-2**	**3-5**	**6-8**	**9-11**	**12-2**
Mean air temperature (°C)								

$\bar{x}$ **2022**	13.2	25.2	14.2	4.4	12.5	24.4	13.6	3.9
$\bar{x}$ **91/2020**	13.4	23.2	13.3	2.9	12.7	22.6	12.7	2.0
$\bar{x}$ **81/2010**	12.9	22.2	12.7	2.4	12.2	21.7	12.1	1.5
$\bar{x}$ **71/2000**	12.4	21.5	12.1	2.4	11.7	21.0	11.6	1.5
$\bar{x}$ **61/1990**	12.2	21.0	12.4	1.9	11.6	20.7	11.8	0.9
Mean minimum air temperature (°C)								
$\bar{x}$ **2022**	18.7	30.9	19.4	8.2	18.1	30.5	18.7	7.6
$\bar{x}$ **91/2020**	18.5	28.7	18.4	6.3	18.2	28.4	18.2	5.8
$\bar{x}$ **81/2010**	18.0	27.8	17.8	5.8	17.7	27.6	17.6	5.2
$\bar{x}$ **71/2000**	17.5	27.0	17.2	5.7	17.2	27.0	17.0	5.2
$\bar{x}$ **61/1990**	17.3	26.6	17.6	5.1	17.0	26.5	17.3	4.5
Mean maximum air temperature (°C)								
$\bar{x}$ **2022**	7.8	19.4	10.7	1.6	6.4	17.8	9.3	0.4
$\bar{x}$ **91/2020**	8.7	17.9	9.5	0.1	7.2	16.4	8.0	-1.4
$\bar{x}$ **81/2010**	8.3	17.0	8.9	-0.3	6.8	15.6	7.4	-1.9
$\bar{x}$ **71/2000**	7.9	16.3	8.4	-0.4	6.4	14.9	7.0	-1.9
$\bar{x}$ **61/1990**	7.7	15.8	8.4	-0.8	6.3	14.6	7.0	-2.5
Mean relative humidity (%)								
2022.	56.4	56.2	77.3	75.7	57.8	57.2	80.2	76.6
$\bar{x}$ **91/2020**	62.1	61.0	71.3	76.8	66.6	64.0	74.4	82.8
$\bar{x}$ **81/2010**	61.7	61.9	71.3	76.0	67.8	66.0	75.6	83.6
$\bar{x}$ **71/2000**	62.5	63.3	72.3	76.0	68.4	66.8	76.4	83.2
$\bar{x}$ **61/1990**	63.4	64.2	71.6	77.2	68.8	67.2	75.2	83.5
Sums and mean precipitation sums (mm)								
$\bar{x}$ **2022**	122.8	196.9	176.0	225.7	114.7	179.5	240.3	170.4
$\bar{x}$ **91/2020**	172.5	217.2	162.9	148.0	157.2	192.3	152.2	126.0
$\bar{x}$ **81/2010**	163.5	222.6	160.7	144.9	152.3	216.6	155.3	122.9
$\bar{x}$ **71/2000**	172.9	221.4	159.6	133.6	160.3	217.1	154.5	112.6
$\bar{x}$ **61/1990**	179.0	208.1	146.1	150.9	160.8	219.9	139.9	121.8

Sums and mean of sunshine duration (h)								
$\bar{x}$ **2022**	721.4	920.6	451.8	307.0	-	-	-	-
$\bar{x}$ **91/2020**	606.9	852.1	475.2	252.5	565.1	818.3	446.1	206.8
$\bar{x}$ **81/2010**	583.6	825.7	464.3	238.4	548.0	779.6	436.1	192.8
$\bar{x}$ **71/2000**	563.1	800.5	451.2	243.2	522.6	741.9	421.9	194.4
$\bar{x}$ **61/1990**	546.4	795.3	460.6	222.6	-	-	-	-
Sums and average number of days with precipitation ≥ 0.1 mm								
2022	27	20	33	38	30	25	34	39
$\bar{x}$ **91/2020**	37.2	30.7	30.8	39.9	35.1	29.2	29.5	36.4
$\bar{x}$ **81/2010**	37.3	31.7	31.1	39.0	34.5	30.6	29.1	34.9
$\bar{x}$ **71/2000**	38.2	32.9	31.3	36.9	34.9	31.8	29.3	32.7
$\bar{x}$ **61/1990**	38.0	32.6	29.3	39.1	35.6	31.7	28.3	35.3
Sums and average number of days with precipitation ≥ 1.0 mm								
2022	20	14	22	30	18	15	19	26
$\bar{x}$ **91/2020**	24.8	22.3	20.6	23.4	23.3	21.6	20.4	22.8
$\bar{x}$ **81/2010**	25.0	22.7	20.5	23.2	22.9	22.4	20.5	22.4
$\bar{x}$ **71/2000**	25.8	23.2	21.3	21.9	24.1	23.1	21.2	20.4
$\bar{x}$ **61/1990**	26.9	23.4	20.6	24.4	25.1	23.5	19.8	22.1

Table S5. Statistical summary of mean minimum, maximum, and mean temperature sums (°C), for the beginning of flowering (BF), full flowering (FF), and the end of flowering (EF) and their standard deviations for 13 woody taxa based on data from station Belgrade and Surčin for the period 2007-2022.

Taxa	Minimum (°C)	Maximum (°C)	Mean (°C)	Std. deviation
Belgrade				
Jasminum nudiflorum Lindl. (BF)	21.832	75.281	40.521	15.779
Jasminum nudiflorum Lindl. (FF)	22.829	155.669	72.017	33.637
Jasminum nudiflorum Lindl. (EF)	83.787	260.529	173.994	60.625
Syringa vulgaris L. (BF)	220.360	358.460	282.982	41.627
Syringa vulgaris L. (FF)	260.571	392.960	316.701	39.783
Syringa vulgaris L. (EF)	360.635	764.198	566.423	90.969
Prunus laurocerasus 'Zabeliana' (BF)	232.710	383.498	316.280	43.258
Prunus laurocerasus 'Zabeliana' (FF)	279.221	455.160	364.195	47.076
Prunus laurocerasus 'Zabeliana' (EF)	436.342	647.679	526.548	64.099
Philadelphus coronarius L. (BF)	417.935	653.259	564.183	74.258

Philadelphus coronarius L. (FF)	442.385	705.179	607.693	67.632
Philadelphus coronarius L. (EF)	893.585	1185.148	1055.370	83.839
Forsythia × *intermedia* Zabel (BF)	79.350	193.718	122.607	31.659
Forsythia × *intermedia* Zabel (FF)	106.942	217.375	150.640	27.923
Forsythia × *intermedia* Zabel (EF)	260.571	438.750	342.840	46.465
Cornus sanguinea L. (BF)	413.259	617.159	536.084	60.551
Cornus sanguinea L. (FF)	460.509	653.259	585.499	54.932
Cornus sanguinea L. (EF)	726.509	956.398	814.298	62.588
Cornus alba L. (BF)	410.664	590.421	480.700	63.836
Cornus alba L. (FF)	436.342	640.298	531.459	65.054
Cornus alba L. (EF)	665.792	956.398	781.049	80.311
Cornus alba 'Sibirica' (BF)	381.304	582.321	461.367	65.892
Cornus alba 'Sibirica' (FF)	422.692	618.771	511.203	68.933
Cornus alba 'Sibirica' (EF)	643.892	928.098	759.314	76.335
Surčin				
Ficus carica L. (BF)	829.248	1087.282	924.185	72.139
Ficus carica L. (FF)	1235.582	1882.335	1381.822	158.726
Ficus carica L. (EF)	1748.866	2206.935	1948.072	115.630
Lonicera periclymenum 'Serotina' (BF)	401.610	586.290	493.800	50.924
Lonicera periclymenum 'Serotina' (FF)	920.544	1417.332	1138.360	119.610
Lonicera periclymenum 'Serotina' (EF)	1528.360	1862.074	1704.028	84.599
Rosa rugosa Thunb. (BF)	820.584	1049.182	948.144	68.050
Rosa rugosa Thunb. (FF)	1590.166	1883.674	1707.744	96.311
Rosa rugosa Thunb. (EF)	2273.306	2596.482	2426.191	93.951
Yucca gloriosa L. (BF)	930.834	1242.756	1054.575	85.969
Yucca gloriosa L. (FF)	1593.226	2048.645	1748.719	109.222
Yucca gloriosa L. (EF)	2469.776	2823.785	2675.247	115.098
Amorpha fruticosa L. (BF)	483.124	741.490	607.505	69.054
Amorpha fruticosa L. (FF)	511.874	780.590	660.458	71.145
Amorpha fruticosa L. (EF)	829.248	964.640	896.172	45.565

Table S6. Results of Mann-Kendall (Kendall's tau), p-value and Sen's slope test for the mean values of temperature sums GDD (°C) and day of the year DOY in the period 2007-2022 for the beginning of flowering (BF), full flowering (FF), the end of flowering (EF), days from the beginning of the flowering to full flowering (BF-FF) and full flowering to the end of flowering (FF-EF) for 13 woody taxa.

Taxa and phenophase	**GDD**			Phenophase	DOY		
Test	**Kendall's tau**	**p-value**	**Sen's slope**		Kendall's tau	p-value	Sen's slope
Belgrade							
Jasminum nudiflorum Lindl. (BF)	0.033	0.893	0.175	BF	-0.185	0.343	-0.852
Jasminum nudiflorum Lindl. (FF)	0.250	0.192	2.880	BF-FF	0.247	0.205	0.500

Jasminum nudiflorum Lindl. (EF)	-0.200	0.300	-2.901	FF-EF	-0.168	0.391	-0.450
Syringa vulgaris L. (BF)	0.167	0.392	2.579	BF	0.151	0.443	0.367
Syringa vulgaris L. (FF)	0.000	1.000	0.198	BF-FF	-0.688	**0.001***	-0.250
Syringa vulgaris L. (EF)	-0.200	0.300	-7.120	FF-EF	-0.356	0.064	-0.962
Prunus laurocerasus 'Zabeliana' (BF)	0.017	0.964	0.227	BF	0.101	0.620	0.125
Prunus laurocerasus 'Zabeliana' (FF)	-0.050	0.822	-1.707	BF-FF	-0.532	**0.007***	-0.333
Prunus laurocerasus 'Zabeliana' (EF)	-0.200	0.300	-4.093	FF-EF	0.256	0.189	0.375
Philadelphus coronarius L. (BF)	0.217	0.260	6.620	BF	0.427	**0.026***	0.750
Philadelphus coronarius L. (FF)	0.083	0.685	2.603	BF-FF	-0.435	**0.035***	-0.111
Philadelphus coronarius L. (EF)	0.317	0.096	9.609	FF-EF	0.085	0.684	0.155
Forsythia × *intermedia* Zabel (BF)	0.033	0.893	0.256	BF	-0.218	0.259	-0.764
Forsythia × *intermedia* Zabel (FF)	-0.250	0.192	-2.053	BF-FF	-0.418	**0.032***	-0.500
Forsythia × *intermedia* Zabel (EF)	-0.167	0.392	-3.231	FF-EF	0.415	**0.034***	0.414
Cornus sanguinea L. (BF)	0.067	0.753	1.325	BF	0.228	0.240	0.293
Cornus sanguinea L. (FF)	-0.017	0.964	-0.270	BF-FF	-0.274	0.178	-0.113
Cornus sanguinea L. (EF)	0.200	0.300	4.274	FF-EF	-0.043	0.856	0.000
Cornus alba L. (BF)	0.150	0.444	2.588	BF	0.252	0.191	0.613
Cornus alba L. (FF)	-0.017	0.964	-0.247	BF-FF	-0.609	**0.002***	-0.240
Cornus alba L. (EF)	-0.067	0.753	-2.511	FF-EF	-0.366	0.061	-0.382
Cornus alba 'Sibirica' (BF)	0.133	0.499	3.205	BF	0.264	0.174	0.567
Cornus alba 'Sibirica' (FF)	0.017	0.964	0.493	BF-FF	-0.500	**0.013***	-0.191
Cornus alba 'Sibirica' (EF)	-0.150	0.444	-3.314	FF-EF	-0.366	0.061	-0.429
Surčin							
Ficus carica L. (BF)	-0.100	0.620	-2.739	BF	0.182	0.363	0.174
Ficus carica L. (FF)	0.050	0.822	1.924	BF-FF	-0.196	0.319	-0.303
Ficus carica L. (EF)	0.033	0.893	2.038	FF-EF	-0.088	0.680	0.000
Lonicera periclymenum 'Serotina' (BF)	0.200	0.300	2.944	BF	0.427	**0.026***	0.500
Lonicera periclymenum 'Serotina' (FF)	0.183	0.344	4.418	BF-FF	0.017	0.964	0.000
Lonicera periclymenum 'Serotina' (EF)	0.167	0.392	5.033	FF-EF	-0.180	0.364	-0.250
Rosa rugosa Thunb. (BF)	-0.017	0.964	-0.907	BF	0.141	0.493	0.127
Rosa rugosa Thunb. (FF)	0.150	0.444	6.310	BF-FF	0.249	0.204	0.279
Rosa rugosa Thunb. (EF)	0.400	**0.034***	13.327	FF-EF	0.114	0.583	0.155
Yucca gloriosa L. (BF)	-0.317	0.096	-8.386	BF	-0.237	0.222	-0.400
Yucca gloriosa L. (FF)	0.083	0.685	1.377	BF-FF	0.325	0.094	0.500

Yucca gloriosa L. (EF)	0.217	0.260	9.529	FF-EF	0.205	0.297	0.652
Amorpha fruticosa L. (BF)	-0.167	0.392	-4.071	BF	-0.110	0.588	-0.333
Amorpha fruticosa L. (FF)	-0.283	0.137	-5.673	BF-FF	-0.324	0.118	-0.077
Amorpha fruticosa L. (EF)	-0.283	0.137	-4.887	FF-EF	0.186	0.342	0.318

Values in bold are slopes for statistically significant trends at level p<0.05.

Table S7. Statistical summary of average minimum, maximum and mean DOY for the beginning of the flowering (BF), the period from the beginning to full flowering (BF-FF) and full flowering to the end of flowering (FF-EF), and their standard deviations for 13 woody taxa for the period 2007-2022.

Taxa	Minimum	Maximum	Mean	Std. deviation
Belgrade				
Jasminum nudiflorum Lindl. (BF)	5.000	76.000	30.313	21.124
Jasminum nudiflorum Lindl. (BF-FF)	2.000	45.000	13.688	12.658
Jasminum nudiflorum Lindl. (FF-EF)	2.000	52.000	26.438	15.824
Syringa vulgaris L. (BF)	79.000	106.000	92.500	6.703
Syringa vulgaris L. (BF-FF)	2.000	6.000	3.938	1.389
Syringa vulgaris L. (FF-EF)	12.000	37.000	24.313	7.012
Prunus laurocerasus 'Zabeliana' (BF)	88.000	108.000	96.813	6.263
Prunus laurocerasus 'Zabeliana' (BF-FF)	2.000	9.000	4.875	2.604
Prunus laurocerasus 'Zabeliana' (FF-EF)	9.000	27.000	15.875	4.911
Philadelphus coronarius L. (BF)	106.000	135.000	120.938	7.776
Philadelphus coronarius L. (BF-FF)	2.000	12.000	3.500	2.477
Philadelphus coronarius L. (FF-EF)	23.000	40.000	32.313	4.438
Forsythia × *intermedia* Zabel (BF)	46.000	77.000	62.563	9.784
Forsythia × *intermedia* Zabel (BF-FF)	2.000	14.000	6.125	4.193
Forsythia × *intermedia* Zabel (FF-EF)	18.000	48.000	30.750	6.319
Cornus sanguinea L. (BF)	110.000	131.000	118.938	6.027
Cornus sanguinea L. (BF-FF)	2.000	9.000	4.000	1.862
Cornus sanguinea L. (FF-EF)	12.000	26.000	17.750	4.091
Cornus alba L. (BF)	106.000	125.000	114.313	6.030
Cornus alba L. (BF-FF)	2.000	6.000	4.125	1.360
Cornus alba L. (FF-EF)	14.000	27.000	20.063	4.008
Cornus alba 'Sibirica' (BF)	104.000	123.000	112.563	6.164
Cornus alba 'Sibirica' (BF-FF)	2.000	6.000	4.188	1.328
Cornus alba 'Sibirica' FF-EF	13.000	27.000	19.813	4.151
Surčin				
Ficus carica L. (BF)	151.000	161.000	155.063	3.586
Ficus carica L. (BF-FF)	17.000	54.000	26.563	8.033
Ficus carica L. (FF-EF)	16.000	37.000	30.438	4.939
Lonicera periclymenum 'Serotina' (BF)	116.000	130.000	121.500	4.397
Lonicera periclymenum 'Serotina' (BF-FF)	35.000	53.000	46.375	4.978
Lonicera periclymenum 'Serotina' (FF-EF)	24.000	43.000	31.375	4.588

Rosa rugosa Thunb. (BF)	150.000	166.000	156.750	5.183
Rosa rugosa Thunb. (BF-FF)	37.000	48.000	42.688	3.049
Rosa rugosa Thunb. (FF-EF)	30.000	44.000	37.688	3.772
Yucca gloriosa L. (BF)	153.000	172.000	163.063	5.183
Yucca gloriosa L. (BF-FF)	30.000	52.000	38.563	5.228
Yucca gloriosa L. (FF-EF)	41.000	59.000	50.813	5.833
Amorpha fruticosa L. (BF)	121.000	143.000	132.000	6.957
Amorpha fruticosa L. (BF-FF)	2.000	8.000	4.000	1.366
Amorpha fruticosa L. (FF-EF)	11.000	31.000	17.563	5.966