














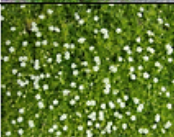


















Plants for public spaces catalog

Instructions for using the catalog









The main purposes of using this catalog:

- educating the students about various plant material,
- acquiring the skills to determine the main characteristics of given habitat,
- learning the the ability to read the requirements of plants,
- enabling the proper selection of plants due to habitat limitations.

		Erasmus+		 <small>GLOCAL - innowacyjne kształcenie przyszłych inżynierów odpowiadające na problemy współczesnych miast</small> <small>GLOCAL - innovative training of future engineers responding to problems of contemporary cities</small> GLOCAL <small>Erasmus+ 2019-1-PL01-KA203-065654</small>		
<i>Euphorbia polychroma</i> wilczomlecz pstry	6	 		0,2 - 0,5		
<i>Phlox subulata</i> flokks szydlasty	4			0,1		
<i>Sagina subulata</i> karmnik ościsty	4			0,1		
<i>Sedum Acre</i> rozchodnik ostry	5			0,05		
<i>Sedum album</i> rozchodnik biały	6			0,1		
<i>Sedum hybridum</i> rozchodnik mieszańcowy	4			0,25		
<i>Sedum kamtschaticum</i> rozchodnik kamczacki	5			0,1		

Information contained in the catalog

Basic data:

<i>Ribes alpinum</i>							
porzeczka alpejska	3	  		 1,0 - 1,5	 1,0 - 2,0		

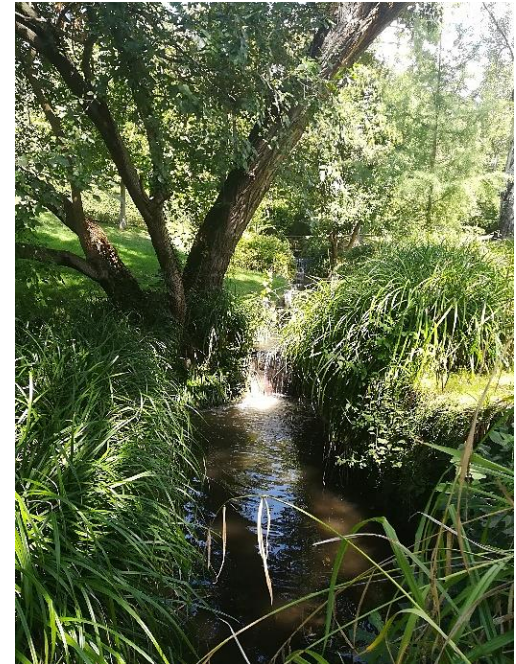
Labels pointing to the table:

- latin name (points to the first cell)
- ultimate width (points to the fourth cell)
- ultimate height (points to the fifth cell)
- illustrative photo (points to the eighth cell)

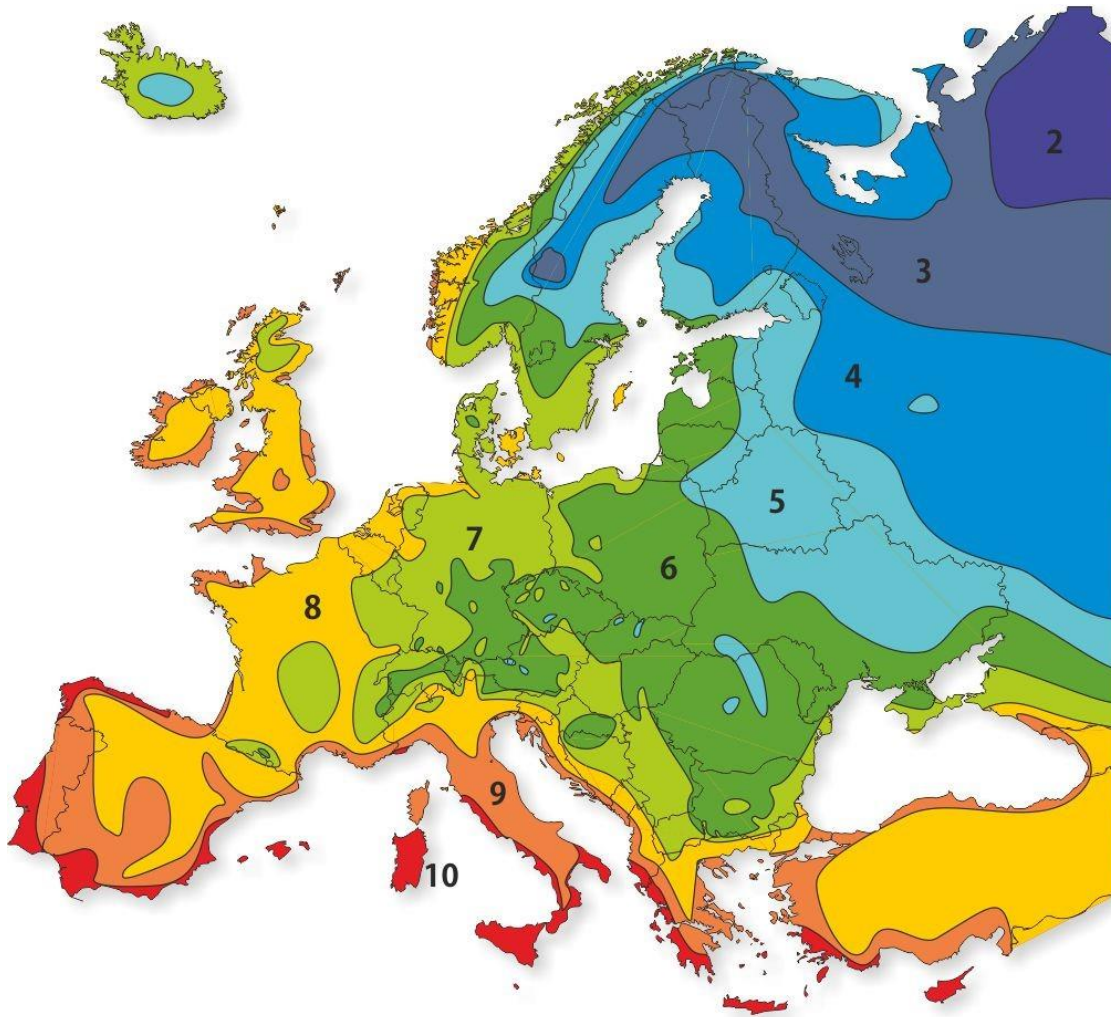


When selecting plants for the project, in addition to aesthetic values such as the color of: leaves, flowers, fruits, shape, plant size, etc., **habitat requirements** should be taken into account:

- frost resistance,
- insolation,
- substrate moisture.



Hardiness zones in Europe



Hardiness zone is defined by average annual minimum temperature in the given area.

Used to indicate in which area can a given plant grow.



strefa	temp. od [°C]	temp. do [°C]
2	-45,5	-40,1
3	-40,0	-34,5
4	-34,4	-28,9
5	-28,8	-23,4
6	-23,3	-17,8
7	-17,7	-12,3
8	-12,2	-6,7
9	-6,6	-1,2
10	-1,1	+4,4



Zone number and assigned colour.



Range of minimum temperature in a given zone.



6

od -23,3

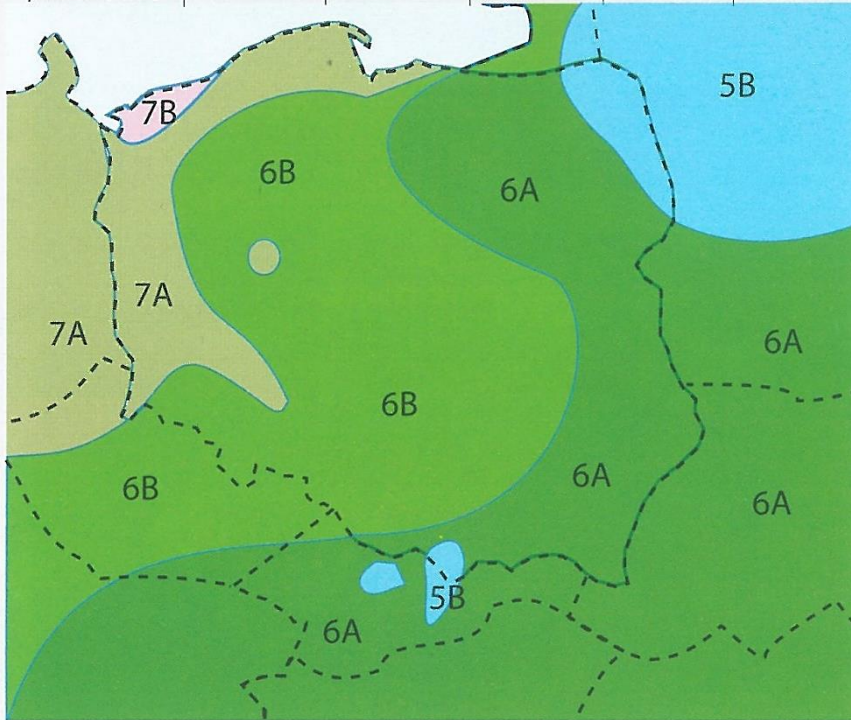
do -17,8

- The zone number informs about the plant's adaptation to lower temperatures.
- The higher the number, the lower the frost resistance, the greater the sensitivity to frost.
- A plant marked with a given zone can be grown in the indicated zone and warmer zones. In the colder zone it will freeze.



Mapa stref mrozoodporności roślin w Polsce

Kolor	5B	6A	6B	7A	7B
Minimalna temperatura (w °C)	-26 do -23	-23 do -21	-20 do -18	-18 do -15	-15 do -12











Within zones 5-8 there are also subzones A and B. Therefore, when its needed, please read the hardiness zones map for a given country.

For example, in Poland we can distinguish 5B, 6A, 6B, 7A and 7B zones.



plant hardiness zone

	<i>Ribes alpinum</i> porzeczka alpejska	3	  		 1,0 - 1,5	 1,0 - 2,0		
--	--	----------	---	---	--	--	---	---



INNOVATIVE TRAINING OF FUTURE ENGINEERS
RESPONDING TO PROBLEMS OF CONTEMPORARY CITIES
2019-1-PL01-KA203-065654

GLOCAL PROJECT COORDINATOR
GLOCAL@PB.EDU.PL
WWW.GLOCAL.PB.EDU.PL



Habitat requirements

The plant's requirements for the amount of sunlight needed and tolerated by it.



sunny position



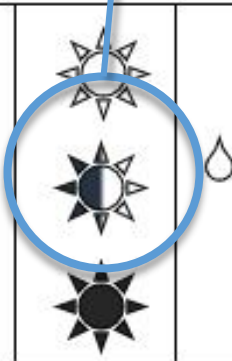




semi-shade position



position in the shade



preferred position due to the sunlight

<i>Ribes alpinum</i> porzeczka alpejska	3		 1,0 - 1,5	 1,0 - 2,0		
--	----------	---	--	--	---	---

There are plants that can grow in each position: in the sun, in partial shade and in the shade.

The labeling order is the most important while reading the instructions, e.g. *Ribes alpinum* copes well in all conditions, but grows best in the sun.

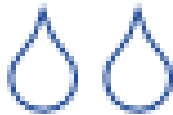


Habitat requirements

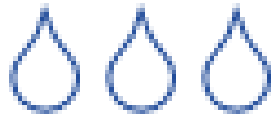
Water requirements of the plant; how much water it needs and whether it can tolerate periodic flooding.



plants for dry or low-humidity places











plants for medium-humidity places



plants for places with high humidity



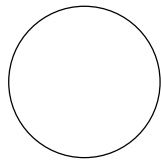
preferred position due to the soil humidity

<i>Ribes alpinum</i>							
porzeczka alpejska	3			1,0 - 1,5	1,0 - 2,0		
							

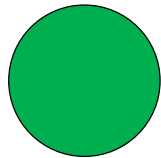


Plant value during winter season

Selection of plants due to the foliage preservation in winter









plants which loose their foliage in winter



evergreen plants, retaining their foliage in winter



evergreen/shedding leaves

<i>Ribes alpinum</i> porzeczka alpejska	3			 1,0 - 1,5	 1,0 - 2,0		
---	----------	---	---	--	--	---	---





Sedum – plant type name



Examples:

Hedera helix



Euonymus fortunei



EN

THIS PROJECT HAS BEEN FUNDED WITH SUPPORT FROM THE EUROPEAN COMMISSION.
THIS COMMUNICATION REFLECTS THE VIEWS ONLY OF THE AUTHOR, AND THE COMMISSION CANNOT BE HELD RESPONSIBLE FOR ANY USE WHICH MAY BE MADE OF THE INFORMATION CONTAINED THEREIN.

PL

PUBLIKACJA ZOSTAŁA ZREALIZOWANA PRZY WSPARCIU FINANSOWYM KOMISJI EUROPEJSKIEJ.
PUBLIKACJA ODZWIERCIEDLA JEDYNIJE STANOWISKO JEJ AUTORÓW I KOMISJA EUROPEJSKA ORAZ NARODOWA AGENCJA PROGRAMU ERASMUS+ NIE PONOSZĄ ODPOWIEDZIALNOŚCI ZA JEJ WARTOŚĆ MERYTORYCZNĄ.

ES

EL PRESENTE PROYECTO HA SIDO FINANCIADO CON EL APOYO DE LA COMISIÓN EUROPEA. ESTA PUBLICACIÓN [COMUNICACIÓN] ES RESPONSABILIDAD EXCLUSIVA DE SU AUTOR. LA COMISIÓN NO ES RESPONSABLE DEL USO QUE PUEDA HACERSE DE LA INFORMACIÓN AQUI DIFUNDIDA.

LT

ŠIS PROJEKTAS FINANSUOJAMAS REMIANT EUROPOS KOMISIJAI.
ŠIS LEIDINYS [PRANEŠIMAS] ATSPINDI TIK AUTORIAUS POŽIŪRĮ, TODĖL KOMISIJA NEGALI BŪTI LAIKOMA ATSAKINGA UŽ BET KOKĮ JAME PATEIKIAMOS INFORMACIJOS NAUDOJIMĄ.



INNOVATIVE TRAINING OF FUTURE ENGINEERS
RESPONDING TO PROBLEMS OF CONTEMPORARY CITIES
2019-1-PL01-KA203-065654

GLOCAL PROJECT COORDINATOR
GLOCAL@PB.EDU.PL
WWW.GLOCAL.PB.EDU.PL





GLOCAL - INNOWACYJNE KSZTAŁCENIE PRZYSZŁYCH
INŻYNIERÓW ODPOWIADAJĄCE NA PROBLEMY
WSPÓŁCZESNYCH MIAST

GLOCAL - INNOVATIVE TRAINING OF FUTURE ENGINEERS
RESPONDING TO PROBLEMS OF CONTEMPORARY CITIES

GLOCAL

ERASMUS+ 2019-1-PL01-KA203-065654

GLOCAL PROJECT COORDINATOR
GLOCAL@PB.EDU.PL
WWW.GLOCAL.PB.EDU.PL



Erasmus+