Royal Horticultural Society

Sharing the best in Gardening

HARDINESS RATINGS

RHS Registered Charity No: 222879/SC038262

Rating	Temperature ranges (˚C)	Category	Definition	USDA
H1a	>15	**Heated greenhouse – tropical**	Under glass all year.	13
H1b	10 – 15	**Heated greenhouse – subtropical**	Can be grown outside in the summer in hotter, sunny and sheltered locations (such as city centre areas), but generally perform better under glass all year round.	12
H1c	5 – 10	**Heated greenhouse – warm temperate**	Can be grown outside in the summer throughout most of the UK while day-time temperatures are high enough to promote growth. (Most bedding plants, tomatoes and cucumbers).	11
H2	1– 5	**Tender – cool or frost-free greenhouse**	Tolerant of low temperatures, but not surviving being frozen. Except in frost-free inner-city areas or coastal extremities requires glasshouse conditions. Can be grown outside once risk of frost is over. (Most succulents, many subtropical plants, annual bedding plants, many spring-sown vegetables).	10b
H3	1 – -5	**Half hardy – unheated greenhouse/mild winter.**	Hardy in coastal and relatively mild parts of the UK except in severe winters and at risk from sudden (early) frosts. May be hardy elsewhere with wall shelter or good microclimate. Likely to be damaged or killed in cold winters, particularly with no snow cover or if pot grown. Can often survive with some artificial protection in winter. (Many Mediterranean-climate plants, spring sown vegetables for later harvesting).	9b/10a
H4	-10 – -5	**Hardy – average winter**	Hardy though most of the UK apart from inland valleys, at altitude and central/northerly locations. May suffer foliage damage and stem dieback in harsh winters in cold gardens. Some normally hardy plants may not survive long wet winters in heavy or poorly drained soil. Plants in pots are more vulnerable to harsh winters, particularly evergreens and many bulbs. (Many herbaceous and woody plants, winter brassicas, leeks).	8b/9a
H5	-15 – -10	**Hardy - cold winter**	Hardy in most places throughout the UK even in severe winters. May not withstand open/exposed sites or central/northern locations. Many evergreens will suffer foliage damage, and plants in pots will be at increased risk. (Many herbaceous and woody plants, some brassicas, leeks).	7b/8a
H6	-20 – -15	**Hardy – very cold winter**	Hardy in all of UK and northern Europe. Many plants grown in containers will be damaged unless given protection. (Herbaceous and woody plants from continental climates).	6b/7a
H7	< -20	**Very hardy**	Hardy in the severest European continental climates including exposed upland locations in the UK. (Herbaceous and woody plants from continental climates).	6a-1

Hardiness rating notes

1. *New hardiness ratings supersede the previous RHS hardiness ratings (H1-H4) which are not the direct equivalents of the new ratings.*
2. *The temperature ranges are intended to be absolute minimum winter temperatures (˚C), not the long-term average annual extreme minimum temperature used for the USDA zones.*