



Soil Temperatures for Optimum Vegetable Seed Germination

Vegetable	Minimum °F	Optimum Range °F	Optimum °F	Maximum °F
Asparagus	50	60 – 85	75	95
Bean	60	60 – 85	80	95
Bean, Lima	60	65 – 85	85	85
Beet	40	50 – 85	85	85
Cabbage	40	45 – 95	85	100
Cantaloupe	60	75 – 95	90	100
Carrot	40	45 – 85	80	95
Cauliflower	40	45 – 85	80	100
Celery	40	60 – 70	70	85
Chard, Swiss	40	50 – 85	85	95
Corn	50	60 – 95	95	105
Cucumber	60	60 – 95	95	105
Eggplant	60	75 – 90	85	95
Lettuce	35	40 – 80	75	85
Okra	60	70 – 95	95	105
Onion	35	50 – 95	75	95
Parsley	40	50 – 85	75	90
Parsnip	35	50 – 70	65	85
Pea	40	40 – 75	75	85
Pepper	60	65 – 95	85	95
Pumpkin	60	70 – 90	90	100
Radish	40	45 – 90	85	95
Spinach	35	45 – 75	70	85
Squash	60	70 – 95	95	100
Tomato	50	70 – 95	85	95
Turnip	40	60 – 105	85	105
Watermelon	60	70 – 95	95	105

Soil temperature should be taken by inserting a soil thermometer 3 to 4 inches deep into the soil surface. Soil temperatures should be consistent for several days before seeds are sown to ensure that the seeds are being exposed to optimum temperatures for germination. For outdoor soil Temps online maps are very helpful. One to consider is <https://www.greencastonline.com/tools/soil-temperature>