

SOIL TEMPERATURE CONDITION FOR VEGETABLE SEED GERMINATION¹

VEGETABLE	MIN. (°F)	RANGE (°F)	OPTIMUM (°F)	MAX (°F)	DAYS TO GERMINATION
BEAN ^d	60°	60° - 85°	80°	95°	7 - 14
BEAN LIMA ^e	60°	65° - 85°	85°	85°	10 - 14
BEET ^b	40°	50° - 85°	85°	95°	7 - 14
CABBAGE ^{a, b}	40°	45° - 95°	85°	100°	7 - 10
CARROT ^b	40°	45° - 85°	80°	95°	10 - 21
CAULIFLOWER ^{a, b}	40°	45° - 85°	80°	100°	3 - 10
CHARD SWISS ^b	50°	50° - 85°	85°	95°	7 - 14
CORN ^d	50°	60° - 95°	95°	105°	7 - 10
CUCUMBER ^{c, d}	60°	75° - 95°	95°	105°	7 - 10
EGGPLANT ^c	60°	40° - 80°	85°	95°	7 - 12
LETTUCE ^a	35°	40° - 80°	75°	85°	7 - 14
MUSKMELON ^e	60°	75° - 95°	90°	100°	7 - 10
OKRA ^e	60°	70° - 95°	95°	105°	8 - 12
ONION ^a	35°	50° - 95°	75°	95°	10 - 14
PARSLEY ^b	40°	50° - 85°	75°	90°	10 - 21
PARSNIP ^b	35°	50° - 70°	65°	85°	14 - 21
PEA ^b	40°	40° - 75°	75°	85°	8 - 10
PEPPER ^c	60°	65° - 95°	85°	95°	14 - 21
PUMPKIN ^d	60°	70° - 90°	95°	100°	7 - 10
RADISH ^b	40°	45° - 90°	95°	95°	3 - 7
SPINACH ^b	35°	45° - 75°	70°	85°	7 - 10
SQUASH ^d	60°	70° - 95°	95°	100°	9 - 12
TOMATO ^c	59°	60° - 85°	85°	95°	5 - 14
TURNIP ^b	40°	60° - 105°	85°	105°	6 - 7
WATERMELON ^e	60°	70° - 95°	95°	105°	7 - 10

¹Compiled by J.F. Harrington, Dept. of Vegetable Crops, University of California, Davis.

²Daily fluctuation to 60° or lowers at night is essential

^aHardy vegetables to grow as transplants. ^bHardy vegetables for direct seeding.

^cTender vegetables to grow as transplants. ^dTender vegetables for direct seeding.

^eTender vegetables for direct seeding, 2 weeks after last frost.