

SOIL TEMPERATURE CONDITION FOR VEGETABLE SEED GERMINATION

| VEGETABLE | MIN. (0°F) | RANGE (0°F) | OPTIMUM (0°F) | MAX. (0°F) | DAYS TO GERMINATION |
|-------------|---------------|----------------|------------------|---------------|---------------------|
| ASPARAGUS | 50° | 60° -85° | 75° | 95° | 21 -30 |
| BEAN | 60° | 60°-85° | 80° | 95° | 7 -14 |
| BEAN LIMA | 60° | 65° -85° | 85° | 85° | 10-14 |
| BEET | 40° | 50° -85° | 85° | 95° | 7 -14 |
| CABBAGE | 40° | 45°-95° | 85° | 100° | 7 -10 |
| CARROT | 40° | 45°-85° | 80° | 95° | 10-21 |
| CAULIFLOWER | 40° | 45°-85° | 80° | 100° | 3 -10 |
| CELERY | 40° | 60°-70° | 70° | 85° | 14-21 |
| CHARD SWISS | 50° | 50° -85° | 85° | 95° | 7 -14 |
| CORN | 50° | 60° -95° | 95° | 105° | 7 -10 |
| CUCUMBER | 60° | 60° -95° | 95° | 105° | 7 -10 |
| EGGPLANT | 60° | 75° -95° | 85° | 95° | 7 -12 |
| LETTUCE | 35° | 40° -80° | 75° | 85° | 7 -14 |
| MUSKMELON | 60° | 75° -95° | 90° | 100° | 7 -10 |
| OKRA | 60° | 70° -95° | 95° | 105° | 8 -12 |
| ONION | 35° | 50° -95° | 75° | 95° | 10-14 |
| PARSLEY | 40° | 50° -85° | 75° | 90° | 10-21 |
| PARSNIP | 35° | 50° -70° | 65° | 85° | 14 -21 |
| PEA | 40° | 40° -75° | 75° | 85° | 8 -10 |
| PEPPER | 60° | 65° -95° | 85° | 95° | 14 -21 |
| PUMPKIN | 60° | 70° -90° | 95° | 100° | 7 -10 |
| RADISH | 40° | 45° -90' | 95° | 95° | 3 -7 |
| SPINACH | 35° | 45°-75° | 70° | 85° | 7 -10 |
| SQUASH | 60° | 70° -95° | 95° | 100° | 9 -12 |
| TOMATO | 59° | 60° -85° | 85° | 95° | 5 -14 |
| TURNIP | 40° | 60° -105° | 85° | 105° | 6 -7 |
| WATERMELON | 60° | 70° -95° | 95° | 105° | 7 -10 |

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TEMPERATURES AND TIMES REQUIRED FOR GROWING

PLANTS FOR FIELD TRANSPLANTING

| Vegetable | Day (°F) | Night (°F) | Time (weeks) |
|------------------|-------------|---------------|-----------------|
| Asparagus | 70° - 80° | 65° - 70° | 8 - 10 |
| Broccoli | 60° - 70° | 50° - 60° | 5 - 7 |
| Brussels Sprouts | 60° - 70° | 50° - 60° | 5 - 7 |
| Cabbage | 60° - 70° | 50° - 60° | 5 - 7 |
| Cauliflower | 60° - 70° | 50° - 60° | 5 - 7 |
| Celery | 65° - 75° | 60° - 65° | 10-12 |
| Sweet Corn | 70° - 75° | 60° - 65° | 3 - 4 |
| Cucumber | 70° - 75° | 60° - 65° | 3 - 4 |
| Eggplant | 70° - 80° | 65° - 70° | 6 - 8 |
| Lettuce | 70° - 80° | 50° - 55° | 5 - 7 |
| Muskmelon | 70° - 75° | 60° - 65° | 3 - 4 |
| Onion | 60° - 65° | 55° - 60° | 10 - 12 |
| Pepper | 65° - 75° | 60° - 65° | 6 - 8 |
| Summer Squash | 70° - 75° | 60° - 65° | 3 - 4 |
| Tomato | 70° - 75° | 65° - 75° | 5 - 7 |
| Watermelon | 70° - 80° | 65° - 70° | 3 - 4 |

Select the lower temperature on cloudy days. Adjust temperatures slightly to alter growth rates.

TRANSPLANTS FOR THE GARDEN

Most gardeners use transplants in the garden at some time or another to give long season plants a chance to grow to maturity under their preferred weather conditions, or just to lengthen the harvest season. Tomatoes would certainly have a short harvest period in all but the mid-elevation range of Arizona if started from seed in the ground, and peppers and eggplants might not produce at all if not grown from transplants. Due to the amount of time, attention and need for controlled growing conditions, many gardeners prefer to purchase plants for their gardens.

