



Germination Characteristics for Microgreen Seeds

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Crop Type	Temperature Range (°F)	Days to Germination	Sunlight for Germination	Pre-Soaking Seed
Amaranth – all types	60-90	3-4	Light cover	
Arugula – all types	60-75	5-7	Light cover	
Basil - all types	77-86	3-7	Light cover	
Beet	50 - 85	5-7	Light cover	
Borage	60-70	7-14	Light cover	
Broccoli	65-70	3-7	No cover	
Cabbage - red	65-75	3-10	No cover	
Carrot tops	45 - 85	10-14	Cover	
Celery		7-14	Cover	
Swiss Chard	50 - 85	5-7	Cover	
Chervil	70-85	7-14	Light cover	
Chive	60-70	7-10	Cover	
Cilantro	60-70	7-14	cover	
Cucumber	75 - 95	7-10	cover	
Dill	70-85	7-21	Light cover	
Epazote	65-85	7-14	Light cover	
Fennel	65-70	7-14	Light cover	
Fenugreek	65-75	3-5/7-10	Cover	Yes
Kale	65-75	5-7	Light cover	
Lemon Balm	65-70	7-21	No cover	
Mache	41-68	10-14	Cover	
Mint - all types	65-75	14-21	No cover	
Mizuna lettuce	65-70	5-10	No cover	
Mustard – Dijon, red	65-75	5-10	Light cover	
Oregano	68-80	14-21	No cover	
Parsley	50 - 75	10-21	Cover	

Crop Type	Temperature Range (°F)	Days to Germination	Sunlight for Germination	Pre-Soaking Seed
Pea	58-75	7-14	Light cover	
Radish – all types	55-78	3-7	Cover	
Sage	70-85	10-21	Light cover	
Shiso – green, red	6870	7-14	Light cover	Yes
Sorrel – red, green	55-70	7-14	Light cover	
Sunflower	70-85	3-7	Cover	
Tangerine lace	75-80	4-7	Light cover	
Tatsoi	60-75	7-10	Light cover	
Thyme	60-70	14-28	No cover	
Verdolaga	65-75	10-14	No cover	
Watercress - all types	60-70	3-7	Cover	
Wasabi	60-70	5-7	Light cover	

References:

- 1. Kemble, J. and M.B. Musgrove. 2006. Soil temperature conditions for vegetable seed germination. Alabama Cooperative Extension System. ANR-1061.
- 2. Kou, L., Y. Luo, T. Yang, Z. Xiao, E.R. Turner, G.E. Lester, Q. Wang, and M.J. Camp. Postharvest biology, quality and shelf life of buckwheat microgreens. Food Science and Technology 51: 73-78.