SUPPLEMENTARY TABLES

Supplementary Table 1. Comparison of mineral elements in purple radish microgreens and mature leaves of radish

Elements in purple radish microgreens	RDA (ICMR – 2020)	Mature leaves (Secondary data)	References
P - 1116.23 mg/100g	1000 mg/day	1.94 g/kg 50.08 mg/100g 15.95 mg/100g	(1) (2) (3)
K - 5297.7 mg/100g	3500 mg/day	32.22 g/kg 304 mg/100g 150.00 mg/100g	(1) (2) (3)
Ca -191.7 mg/100g	1200 mg/day	11.13 g/kg 234 mg/100g 35.50 mg/100g	(1) (2) (3)
Mg- 408.32 mg/100g	310-400 mg/day	2.59 g/kg 57. 96mg/100g 8.50 mg/100g	(1) (2) (3)
Fe - 22.05 mg/100g	10-30 mg/day	1,503.75 g/kg 3.82 mg/100g 1.86 mg/100g	(1) (2) (3)
Na - 1255 mg/100g	2000 mg/day	17.39mg/100g	(1)
Cu - 5.03 mg/100g	1.5-2 mg/day	5.68 mg/kg 0.29 mg/100g	(1) (2)
Zn - 4.2 mg/100g	14 mg/day	37.49 mg/kg 1.17 mg/100g 0.49 mg/100g	(1) (3) (2)
Mn - 2.44 mg/100g	4 mg/day	85.13 mg/kg 0.90 mg/100g	(1) (2)
Mo -0.1387 mg/100g	0.15-0.5 mg/day	0.019 mg/100g	(1)

Supplementary Table 2. Comparison of mineral elements in fenugreek microgreens and mature leaves

Elements in fenugreek microgreens	RDA (ICMR – 2020)	Mature (Secondary data)	References
Mg- 535.44 mg/100g	310-400 mg/day	63. 67 mg/100g 306.00 mg/100g 67 mg/100g 50.97 mg/100g 22 mg/kg	(2) (3) (4) (5) (6)
Mn- 9.44 mg/100g	4 mg/day	0.84 mg/100g	(2)
Mo- 0.0501 mg/100g	0.15-0.5 mg/day	0.017 mg/100g	(2)
P- 601.3 mg/100g	1000 mg/day	53. 05 mg/100g 70.00 mg/100g 51 mg /100g 60 mg/100g	(2) (3) (4) (6)
K - 13204 mg/100g	3500 mg/day	226 mg/100g 865.20 mg/100g 31 mg/100g 207.67 mg/kg	(2) (3) (4) (6)
Na- 1701.7 mg/100g	2000 mg/day	47.01 mg/100g 76 mg /100g 14.67 mg/kg	(2) (4) (6)
Zn – 6.35 mg/100g	14 mg/day	0.54 mg/100g 2.50 mg/100g	(2) (3)
Ca - 246 mg/100g	1200 mg/day	274 mg/100g 640.00 mg/100g 395 mg/100g 324.63 mg/100g 67.67 mg/kg 105.17 mg/g	(2) (3) (4) (5) (6) (7)
Cu - 27.9 mg/100g	1.5-2 mg/day	0.18 mg/100g 0.26 mg /100g	(2) (4)
Fe –129.9 mg/100g	10-30 mg/day	5.69 mg/100g 42.20 mg/100g 16.5 mg /100g 16.09 mg/100g 6.0 mg/kg	(2) (3) (4) (5) (6)

Supplementary Table 3. Comparison of mineral elements in red amaranth microgreens and mature leaves

Elements in purple radish microgreens	RDA (ICMR – 2020)	Mature leaves (Secondary data)	References
Mg - 679.6 mg/100g	310-400 mg/day	17 7 mg/100g 900.00 mg/100g	(2) (3)
Mn- 5.72 mg/100g	4 mg/day	2.15 mg/100g	(2)
Mo -0.1372mg/100g	0.15-0.5 mg/day	0.01 3 mg/100g	(2)
P- 1755 mg/100g	1000 mg/day	75 . 9 8 mg/100g 575.00 mg/100g	(2) (3)
K - 8684.67 mg/100g	3500 mg/day	56 4 mg/100g 800.00 mg/100g	(2) (3)
Na - 2331.6 mg/100g	2000 mg/day	14 . 5 8 mg/100g	(2)
Zn - 10.18 mg/100g	14 mg/day	1.37 mg/100g 2.80 mg/100g	(2) (3)
Ca- 288.19 mg/100g	1200 mg/day	24 5 mg/100g 1185.00 mg/100g	(2) (3)
Fe - 31.43 mg/100g	10-30 mg/day	7.25 mg/100g 65.00 mg/100g	(2) (3)

Supplementary Table 4. Comparison of mineral elements in red amaranth microgreens and mature leaves

Elements of coriander microgreens	RDA (ICMR – 2020)	Mature (Secondary data)	References
Mg - 269.23 mg/100g	310-400 mg/day	72.68 mg/100g 694 mg /100g	(2) (8)
Mn- 4.3559 mg/100g	4 mg/day	0.96 mg/100g	(2)
Mo - 0.1753 mg/100g	0.15-0.5 mg/day	0.014 mg/100g	(2)
P - 952.69 mg/100g	1000 mg/day	64.69 mg/100g 481 mg/100g	(2) (8)
K - 5946.5 mg/100g	3500 mg/day	546 mg/100g 4466 mg/100g	(2) (8)
Na - 1105.36 mg/100g	2000 mg/day	37.00 mg/100g 211 mg/100g	(2) (8)
Zn- 6.42 mg/100g	14 mg/day	0.68 mg/100g 4.72 mg/100g	(2) (8)
Ca - 188.4 mg/100g	1200 mg/day	146 mg/100g 1246 mg/100g 140 mg/100 g 309.26 mg/g	(2) (8) (9) (7)
Cu- 6.164 mg/100g	1.5-2 mg/day	0.24 mg/100g	(2)
Fe - 29.301 mg/100g	10-30 mg/day	5.30 mg/100g 42.46 mg /100g 10mg/100 g 42.44 mg/g	(2) (8) (9) (7)
Cr - 0.058 mg/100g	50-70 µg/day	0.033 mg/100g	(2)

Supplementary Table 5. Comparison of proximate compounds of purple radish microgreens with mature counterparts

Parameters	Primary data (microgreens)	Secondary data (mature)	References
Carbohydrate	C1N4– 3.8 g/100 g	4.4 g /100g	(10)
Protein	C1N4 – 4 g/100g	3.8 g / 100 g	(10)
Vitamin C	C1N4 -470 mg/100g	114.4 mg / 100 g 38.8mg/100g	(11) (10)
Total phenol	C1N4-75.34 mg/g	61.8 mg/100g 2.3 mg/g	(11) (12)
Total flavonoids	C1N4 –55.205 mg/g	2.1mg/100g,	(11)
Total antioxidants	C1N4 -206.8 mg/g	22.7µmol Fe2+/g	(11)
Carotenoids	C1N4- 3.91 mg/g	486.95 µg/g	(13)

Supplementary Table 6. Comparison of proximate compounds of fenugreek microgreens with mature counterparts

Parameters	**Primary data (microgreens)**	**Secondary data (mature)**	**References**
Carbohydrate	C1N3– 2.75 g/100 g	6 g /100g	(14)
		6.51 mg/g	(5)
Protein	C1N3 – 1.85g/100g	8.93 g / 100 g	(5)
Vitamin C	C1N3 -71.08 mg/100g FW	54.26 mg / 100 g FW	(5)
		52 mg/100 g FW	(14)
		153 mg/100 g FW	(3)
		0.20 mg/g	(15)
Total phenol	C1N3-33.36 GAE mg/g	18.32 mg GAE/g	(16)
		5.2 mg/g dw	(17)
		856mg/100g	(15)
		2.64mg/g	(5)
		53.94 mg/g	(18)
Total flavonoids	C1N3 – 67.39 mg/g	41.89 mg EQ/g	(16)
		21.38 mg/g dw	(17)
		18.27 mg QCE/g	(18).
Total antioxidants	C1N3 -82.10 mg/g	89.44 µg/ml (DPPH)	(16)
		5.38 mg/g dw	(17)
		13.92 mg/g	(19)
Carotenoids	C1N3- 2.50 mg/g	0.21 mg/g	(3)
		2.71 mg/g FW	(19)

Supplementary Table 7. Comparison of proximate compounds of red amaranth microgreens with mature counterparts

Parameters	Primary data (microgreens)	Secondary data (mature)	References
Carbohydrate	C1N3 – 1.610 g/100g	38.9 – 42.11 g/100g 27 g/100g (5-7 weeks mature amaranthus sp)	(20) (21)
Protein	C1N3 – 1.415 g/100g	2.46 g/100 g 3.07 g/100 g	(8) (22)
Vitamin C	C1N3- 112.500 mg/100g	11.6 - 45.3 mg/100g 63 mg/100g	(20) (22)
Total phenol	C1N3- 25.440 mg/g	220.04 GAE µg/g DW 133–146.1 GAE µg/g FW	(23) (24)
Total flavonoids	C1N3- 28.030 mg/g	53.6 – 70.4 QE µg/g FW	(24)
Total antioxidants	C1N3 – 137.650 mg/g	23.7 – 30.2 TEAC µg/g FW	(24)
Carotenoids	C1N3- 3.694 mg/g	30-90 µg/g FW	(24)

Supplementary Table 8. Comparison of proximate compounds of red amaranth microgreens with mature counterparts

Parameters	**Primary data (microgreens)**	**Secondary data (mature)**	**References**
Carbohydrate	C1N4 – 1 g/100 g	6.5 g /100g	(9)
Protein	C1N4 -5.095 g/100g	3.3 g / 100 g	(9)
Vitamin C	C1N4 -72.100 mg/100g	135 mg / 100 g	(9)
Total phenol	C1N4 -58.88 mg/g	24.36 mg GAE/g DW 94 to 109 mg GAE/100 g DW	(25) (26)
Total flavonoids	C1N4 -42.68 mg/g	38.41 mMQuercetin	(27)
Total antioxidants	C1N4 -124.98 mg/g	0.96 mM of FeSO4	(27)

References

1. Godlewska K, Pacyga P, Michalak I, Biesiada A, Szumny A, Pachura N, et al. Systematic investigation of the effects of seven plant extracts on the physiological parameters, yield, and nutritional quality of radish (*Raphanus sativus* var. *sativus*). Front Plant Sci. 2021;12:651152. https://doi.org/10.3389/fpls.2021.651152
2. Longvah T, Anantan I, Bhaskarachary K, Venkaiah K. Indian food composition tables 2017. Hyderabad: National Institute of Nutrition, Indian Council of Medical Research; 2017:2-58.
3. Ramya S, Sood M, Lingaiah HB, Rajesh AM. Microgreens: A nourishment bootstrapper. Pharma Innov J. 2020;11(2):2601-7. https://doi.org/10.22376/ijpbs.2020.11.3.b113-118
4. Fatima T, Maqbool K, Hussain SZ. Potential health benefits of fenugreek. J Med Plants Stud. 2018;6(2):166-9.
5. Udaya VA, Geethalakshmi I, Rajamani K, Uma D. Nutritional and nutraceutical properties of different plant parts of fenugreek (*Trigonella foenum-graecum* L.). J Agric Ecol. 2019;8:30-7. https://doi.org/10.53911/JAE.2019.8204
6. Rani S, Singh N. Comparative nutrient assessment of raw vegetable crops with microgreens: A nutritionally potential, self-growing fresh food supplement for soldiers deployed at high altitude. Int J Food Nutr Diet. 2021;9(2):11-18.
7. Nadhira S, Ramar A, Jegadeeswari V, Srinivasan S. Microgreen production in herbal spices. J Pharmacogn Phytochem. 2021;10(1):168-70.
8. USDA National Nutrient Database for Standard Reference. Release 26. Nutrient data for spices, coriander seed. 2013.
9. Peter KV. Handbook of herbs and spices. Vol. 2. Abingdon: Woodhead Publishing Ltd.; 2004:158-74. https://doi.org/10.1533/9781855738355
10. Gamba M, Asllanaj E, Raguindin PF, Glisic M, Franco OH, Minder B, et al. Nutritional and phytochemical characterization of radish (*Raphanus sativus*): A systematic review. Trends Food Sci Technol. 2021;113:205-18. https://doi.org/10.1016/j.tifs.2021.04.045
11. Ghoora MD, Babu DR, Srividya N. Nutrient composition, oxalate content and nutritional ranking of ten culinary microgreens. J Food Compos Anal. 2020;9:103-495. https://doi.org/10.1016/j.jfca.2020.103495
12. Joshi N, Bains K. Quantification of ascorbic acid, bioactive compounds and antioxidant activity in some unconventional leafy greens. Appl Biol Res. 2021;23(2):209-14. https://doi.org/10.5958/0974-4517.2021.00027.6
13. Park CH, Park SY, Park YJ, Kim JK, Park SU. Metabolite profiling and comparative analysis of secondary metabolites in Chinese cabbage, radish and hybrid × *Brassicoraphanus*. J Agric Food Chem. 2020;68(47):13711-19. https://doi.org/10.1021/acs.jafc.0c04897
14. Srinivasan K. Fenugreek (*Trigonella foenum-graecum*): A review of health beneficial physiological effects. Food Rev Int. 2006;22(2):203-24. https://doi.org/10.1080/87559120600586315
15. Nawaz H, Andaleeb H, Aziz S, Rehman S. Biochemical, phytochemical and antioxidant analysis of leaves and seed of fenugreek plant. Front Chem Sci. 2020;1(2):9-18. https://doi.org/10.52700/fcs.v1i2.8

16. Akhlaghi N, Najafpour-Darzi G. Phytochemical analysis, antioxidant activity and pancreatic lipase inhibitory effect of ethanolic extract of *Trigonella foenum-graecum* L. leaves. Biocatal Agric Biotechnol. 2021;32:101961. https://doi.org/10.1016/j.bcab.2021.101961
17. Choudhary M, Gothwal DK, Kumawat R, Kumawat KR. Assessment of genetic variability and character association in fenugreek (*Trigonella foenum-graecum* L.) genotypes. Int J Pure Appl Biosci. 2017;5(5):1485-92. https://doi.org/10.18782/2320-7051.5110
18. Ghevariya HH, Vatukiya VN, Mistry NH, Jain NK. Comparative evaluation of bioactive compounds and antioxidant properties of fenugreek (*Trigonella foenum-graecum* L.) seed, stem, leaf and microgreens. Third Concept. 2023.
19. Patel J, Dhruve J, Talati J. Nutraceutical and molecular characterization of different fenugreek (*Trigonella foenum-graecum* L.) genotypes. World J Pharm Pharm Sci. 2015;4:1267-87.
20. Xiao Z. Nutrition, sensory, quality and safety evaluation of a new specialty produce: microgreens [doctoral dissertation]. College Park: University of Maryland; 2013.
21. Ayeni A. Nutrient content of micro/baby-green and field-grown mature foliage of tropical spinach (*Amaranthus* sp.) and roselle (*Hibiscus sabdariffa* L.). Foods. 2021;10(11):2546. https://doi.org/10.3390/foods10112546
22. Ebert AW, Wu TH, Yang RY. Amaranth sprouts and microgreens—A homestead vegetable production option to enhance food and nutrition security in the rural–urban continuum. In: Proc Int Symp Southeast Asia Vegetable; 2015; Bangkok, Thailand.
23. Sarker U, Oba S. Antioxidant constituents of three selected red and green color *Amaranthus* leafy vegetable. Sci Rep. 2019;9(1):18233. https://doi.org/10.1038/s41598-019-52033-8
24. Khanam UKS, Oba S. Bioactive substances in leaves of two amaranth species, *Amaranthus tricolor* and *A. hypochondriacus*. Can J Plant Sci. 2013;93(1):47-58. https://doi.org/10.4141/cjps2012-117
25. Palmieri S, Pellegrini M, Ricci A, Compagnone D, Lo Sterzo C. Chemical composition and antioxidant activity of thyme, hemp and coriander extracts: A comparison study of maceration, Soxhlet, UAE and RSLDE techniques. Foods. 2020;9:1221. https://doi.org/10.3390/foods9091221
26. Msaada K, Jemia MB, Salem N, Bachrouch O, Sriti J, Tammar S, et al. Antioxidant activity of methanolic extracts from three coriander (*Coriandrum sativum* L.) fruit varieties. Arab J Chem. 2017;10:S3176-83. https://doi.org/10.1016/j.arabjc.2013.12.011
27. Gupta D. Comparative analysis of spices for their phenolic content, flavonoid content and antioxidant capacity. Am Int J Res Formal Appl Nat Sci. 2013;4(1):38-42.
28. Indian Council of Medical Research. Recommended dietary allowance and estimated average requirements: nutrient requirements for Indians. 2020.