



Mulberry Leaf:

A potential crop for fighting global malnutrition







“Fruits may be eaten raw or cooked. Wild birds, poultry, and hogs are fond of fruits. **Mulberry leaves are sometimes eaten as a vegetable** and are useful as a cattle fodder. Being nutritious and palatable, they are said to improve milk yield of dairy animals.”

-Purdue Horticulture

“The main use of mulberry globally is as feed for the silk worm, but depending on the location, **it is also appreciated... as a delicious vegetable (young leaves and stems)**, for its medicinal properties in infusions (mulberry leaf tea), for landscaping and as animal feed. “

-FAO



“Leaves are highly nutritious and contain vitamins B complex (except B12), C (200-300 mg/100 g), D and flavonols. **They are sometimes eaten as a vegetable**; fruit is eaten fresh or made into juice and stews.”

-World Agroforestry



Component	Spinach ¹	Chaya ¹	Moringa ²	Mulberry ³
Water (%)	90.7	85.3	75	74
Protein (%)	3.2	5.7	6.7	7.3
Fat (%)	0.3	0.4	1.7	1.1
Crude Fiber (%)	0.9	1.9	0.9	N/A
Total CHO (%)	3.8	4.2	13.4	10.7
Ash (%)	1.8	2.2	2.3	4.8
Calcium (mg/100g)	101.3	199.4	440	583
Phosphorus (mg/100g)	30	39	70	76 ⁴
Potassium (mg/100g)	146.5	217.2	259	284 ⁵
Iron (mg/100g)	5.7	11.4	7	7.5
Ascorbic Acid (mg/100g)	48.1	164.7	220	220
Carotenoids (mg/100g)	0.014	0.085		
Beta-carotene (mg/100g)			6.8	12.3

¹ECHO Chaya Technical Note, 2006.

²ECHO Moringa Technical Note, Revised 2000.

³International Journal of Food Science. *Nutritional quality of leaves of some genotypes of mulberry (Morus alba)*, 2006.

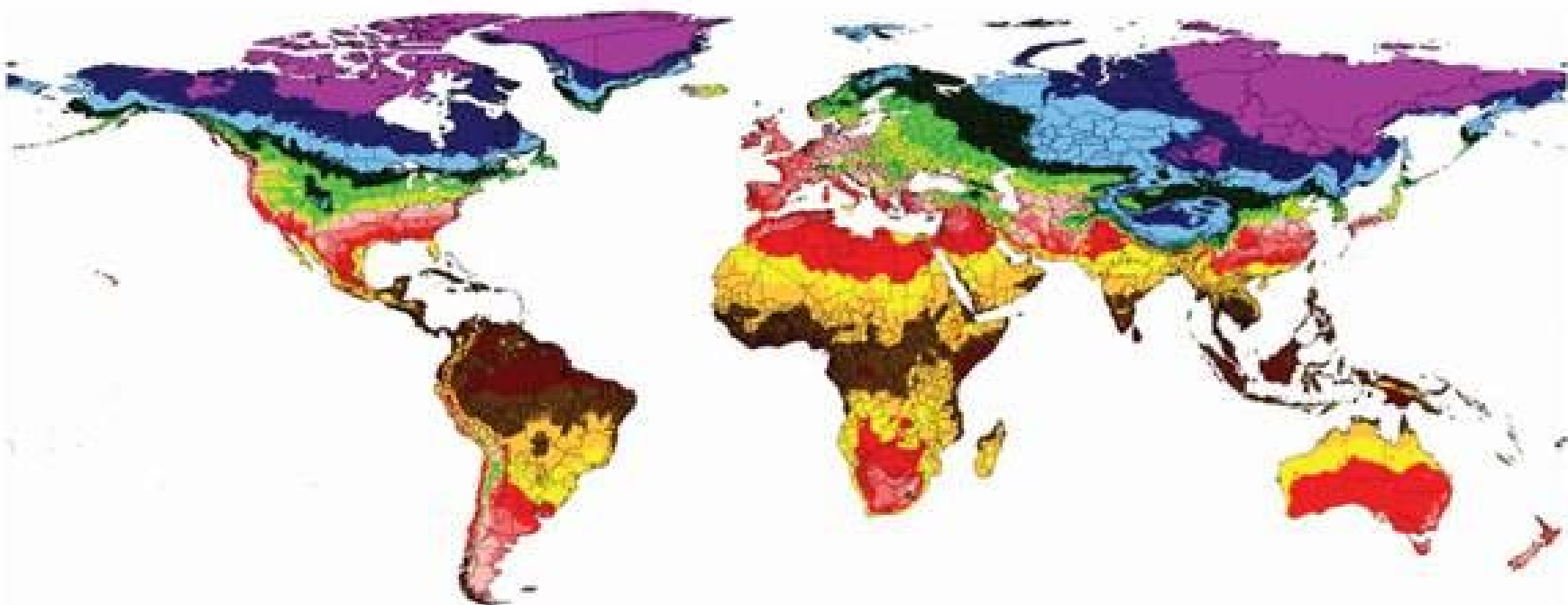
⁴Manuel D. Sanchez, FAO. *Mulberry: an exceptional forage available almost worldwide!*

⁵N. Kitahara, S. Shibata & T. Nishida, FAO. *Management and utilisation of mulberry for forage in Japan.*


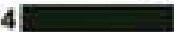











Latin Name	Common Name	Leaf Yield t/ha	% Protein	Protein Yield t/ha
<i>Crotolaria longirostrata</i>	Chipilin	5-11 dry	38% dry	2-4.2
<i>Morus alba</i>	Mulberry	16-52 fresh, 8-13 dry	15-27% dry	1.2-3.8
<i>Moringa oleifera</i>	Moringa	10-50 fresh	5.5% fresh	0.5-2.7
* <i>Glycine max</i>	Soybean	1-5 dry beans	35% dry	0.3-1.8
<i>Cnidoscolus chayamansa</i>	Chaya	20-30 fresh	5.7% fresh	1.1-1.7
* <i>Spinacea oleracea</i>	Spinach	10-35 fresh	2.5% fresh	0.2-0.9





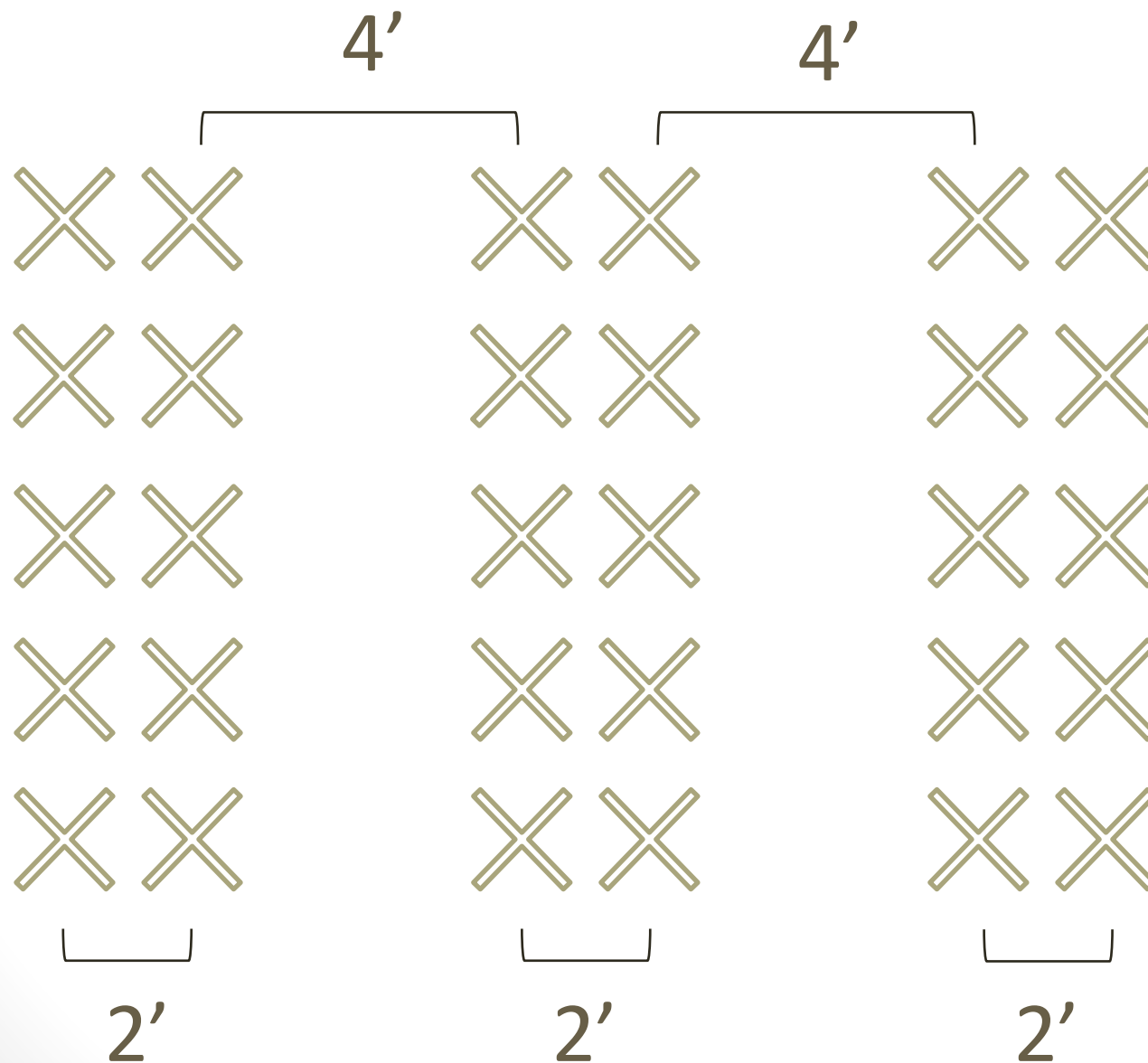


Plant Hardiness Zone

1		4		7		10		13	
2		5		8		11			
3		6		9		12			



Planting Scheme











Culinary Use

- Boil or steam for 10 minutes
- Mulberry chips (like kale chips)
- Bake into lasagnas or casseroles
- Dried into powder
- Add to soups





















Thank you!

Photo Credit:

- Eric Toensmeier
- Las Cañadas
- Vang Vieng Organic Farm
- FAO
- scielo.br
- fromthegrapevine.com

