

ENVIRONMENTAL FOOD INNOVATION: SALT SUSTAINED VEGETABLE “Portulaca Oleracea” AS A FOOD OF FUTURE

(Eco friendly innovation/idea developed by Shripad Vaidya)

The idea regarding food of future:

- 1) Drinking water crisis is increasing all over the world. It will also affect the food production. In the interest of humanity it is better to search food which can grow on salty / sea water. This will also save huge quantity of drinking water. If drinking water becomes easily available it will contribute to overall development of the mankind.
- 2) The vegetable should supplement the diet with the nutrients which are usually found in sea food. In this way it will reduce the burden on sea ecology due to over fishing etc.
- 3) These vegetables / herbs should not adversely interfere in the existing environment and ecology if grown naturally. If not they should be able to grow indoor so as to prevent ecological disturbance.

Up till now this plant was seen as a weed which propagates itself. But I have discovered the quality of “Indian Ghol” as a vegetable which can grow on sea/salty water and also in dry lands. **Hence I have discovered the first salt sustained vegetable in India and this innovation became possible.** The binomial name of this Indian Ghol is “Portulaca Oleracea”.

Vegetable with “Indian Ghol” (Portulaca Oleracea) :

Innovated recipe for this food preparation:

Pluck the leaves (50gms.) of the vegetable, rinse them and cut them. Steam these leaves half boiled along with sprouts (30gms.). Take a big bowl and pour this half cooked vegetables in it. Add grated cucumber, carrot, beet root etc (50gms each). Squeeze one full lemon on it. Add salt to taste, half teaspoon sugar , chilli flakes to taste. Heat two teaspoon olive oil and add to it some asitofedia, mustard seeds, cumin. Put this oil on the vegetable mixture. Garnish with grated paneer and paper powder.

Nutritional Value of this recipe:

S.NO	INGREDIENT	AMOUNT (gm)	ENERGY (kcal)	PROTEIN (gm)	IRON (mg)	VITAMIN A (µg)
1.	Indian Ghol	50	13.5	1.2	7.4	1146
2.	Sprouts (Greengram whole)	30	100.2	12	2.5	28.2
3.	Cucumber	50	6.5	0.2	0.30	
4.	Carrot	50	24	0.45	0.515	945
5.	Beetroot	50	21.5	0.85	0.595	
6.	Lemon	30	17.1	0.3	0.078	
7.	Olive Oil	10	90			
8.	Sugar	2.5	9.95			
	TOTAL		282.75	15	11.388	2119.2

Nutrients available from this Indian Ghol (Portulaca Oleracea) are as follows:

Nutritional value per 100 g (3.5 oz)

Energy 84kJ (20kcal)

Carbohydrates	3.39 g
Fat	0.36 g
Protein	2.03 g
Water	92.86 g
Vitamin A	1320 IU
Thiamine (vit. B ₁)	0.047 mg (4%)

Riboflavin (vit. B ₂)	0.112 mg (9%)
Niacin (vit. B ₃)	0.48 mg (3%)
Vitamin B ₆	0.073 mg (6%)
Folate (vit. B ₉)	12 µg (3%)
Vitamin C	21 mg (25%)
Vitamin E	12.2 mg (81%)
Calcium	65 mg (7%)
Iron	1.99 mg (15%)
Magnesium	68 mg (19%)
Manganese	0.303 mg (14%)
Phosphorus	44 mg (6%)
Potassium	494 mg (11%)
Zinc	0.17 mg (2%)

Purslane contains more omega-3 fatty acids (alpha-linolenic acid in particular than any other leafy vegetable plant. Studies have found that Purslane has 0.01 mg/g of eicosapentaenoic acid (EPA). This is an extraordinary amount of EPA for a land-based vegetable source. EPA is an Omega-3 fatty acid found mostly in fish, some algae, and flax seeds. It also contains vitamins (mainly vitamin A, vitamin C, Vitamin E (alpha-tocopherol) and some vitamin B and carotenoids), as well as dietary minerals, such as magnesium, calcium, potassium, and iron. Also present are two types of betalain alkaloid pigments, the reddish betacyanins (visible in the colouration of the stems) and the yellow betaxanthins (noticeable in the flowers and in the slight yellowish cast of the leaves). Both of these pigment types are potent antioxidants and have been found to have antimutagenic properties in laboratory studies. (More details about this herb can be referred through internet)

Note :

The ENVIS, Environment Department, Government of Maharashtra does not guarantee the authenticity of the data provided. The information provided by Mr Shripad Vaidya.