

ECONOMICS OF THE PRODUCTION

Leaf lettuce result per harvest

Growing period: 10 days seedlings preparation + 21 days growing in the hydroponics system

Conversion rate: 1USD = 21,5CZK (Jan2019)

COSTS

N.O.	Material	Work	Specification	Unit	Unit cost CZK	Quantity	Cost CZK	Cost USD
1	Electricity			1 kWh	5	30,24	151	7
2	Water			1 m3	89,66	0,07	6	0
3	Fertilizer		General Hydroponics FloraNova Grow 473ml /16 OZ	each	529	0,14	74	3
4	Substrate		Rockwool cube 3,6 x 3,6cm	each	4	21	84	4
5	Seeds			package	15	0,1	2	0
6		Sowing		h	230	0,25	58	3
7		Planting		h	230	0,75	173	8
8		System checking		h	230	1	230	11
9		System maintenance		h	230	1	230	11

TOTAL COST:

1007CZK

47USD

WORK:

690CZK

32USD

ENERGIES AND MATERIALS:

317CZK

15USD

REVENUE

N.O.	Product	Unit	Quantity	Usual retail price CZK	Revenue CZK	Revenue in USD
1	Lettuce	each	21	30	630	29

RESULT

- 1) In current setup it is not possible to become profitable with usual retail price of lettuce. One lettuce has to be sold for at least 48CZK / 2,23USD.
- 2) Main articles are: electricity consumption, and labour. Reduction in these articles could bring positive result.

COMMENTS

- 1) It was not intended to create positive economical outcome with the first hydroponic system.
- 2) Hydroponic system brings also other values than just money.
- 3) Very likely it is possible to sell the product for higher price than usual retail price of conventional agriculture product.
- 4) It would be a great success to manage to reduce production costs to end up on even result (no profit, and no loss).