



**RESEARCH ARTICLE**

**Production of a vegetable and a spice crop (*Allium cepa* and *Capsicum annuum*) in western Uttar Pradesh: A survey Report of year 2014**

**Mahesh Chandra and K.S. Rana**

Department of Zoology, Agra College, Agra

Email: maheshagnivanshi@gmail.com

Received: 21<sup>st</sup> December 2014, Revised: 30<sup>th</sup> December 2014, Accepted: 6<sup>th</sup> January 2015

**ABSTRACT**

Onion and chilli are most important commonly greenhouse vegetable crops of India and form a part of daily diet in almost all households. Forty five fields were selected randomly as sample size from district Agra, Aligarh, Mathura and Firozabad. Data collected by interviewing selected farmers by survey method with special designed schedule. Collected data then tabulated according to the purpose of study. The highest production of onion was noted 1020 qt./ 4 acr at first field of village Churthara of district Etah while; the lowest production was noted 77.50 qt./ 0.38 acr at second field of village Narkhi of district Firozabad. On the other hand, the highest production of chilli was noted 2135 qt./ 8.57 acr at first field of village Narkhi of district Firozabad while; the lowest production was noted 65 qt./ 0.42 acr at second field of village Jinawali of district Etah.

**Keywords:** Total production, onion, chilli, Western Uttar Pradesh

**INTRODUCTION**

India is one of the largest producers of onion (*Allium cepa*) and chilli (*Capsicum annuum*) in the world. These are most important commonly greenhouse vegetable crops of India and form a part of daily diet in almost all households. According to the report of Natural Horticultural Board, Gurgaon, India the total chilli (dried) production in India is 1376000 mt and Onion is 19299000 mt. Chilli is the major spice crop occupying about 25% of area under cultivation and contributing 22% of total spice production in the country (Source State of Indian Agriculture 2012-13).

**MATERIALS AND METHODS**

In Western Uttar Pradesh five districts Agra, Aligarh, Mathura, Firozabad and Etah were selected for survey for total production of onion and chilli. From each district three villages were selected. From each village three experimental fields were selected for the study. For both crops, total fifteen villages from five districts i.e. forty five fields were selected randomly as sample size. Village Garhi Vichitra, Barara and Nagla Sikarwar from district Agra; village Kajrauth, Karas and Kaimthal from district Aligarh; village Mahaaban, Jataura and Mnoharpur from district Mathura; village Narkhi, Kathfauri and Bamai from district Firozabad; and village Jinawali, Churthara and Nagla Badha from district Etah were selected (Chandra and Rana 2014). These villages have an important and specific scientific role for present research work because mostly they have both *Allium cepa* and *Capsicum annuum* crops and have same size, same weight of fruit/bulb and same plant length. So this is the main region for selection of these villages for present study.

Data collected for study pertaining to the period January 2014 to December 2014. Land holdings are in acre. So I have decided to take the farm size in acre (Olayiwola 2013). Data collected by interviewing selected farmers by survey method with special designed schedule (Raju and Luckose 1991, Rajur, *et al.* 2008). Collected data then tabulated according to the purpose of study. Simple tabular analysis was made to work out of chilli and onion production (Jagtap, *et al.* 2012).

**Table 1:** Production of onion in Western Uttar Pradesh

District	Site		Onion		
	Village	Field	Production (quintal)	Area (acre)	Productivity (qtl/acr)
Agra	Garhi Vichitra	1	235.00	1.14	206.14
		2	305.50	1.42	215.14
		3	309.00	1.42	217.60
	Barara	1	357.00	1.71	208.77
		2	460.00	2.00	230.00
		3	580.00	2.47	238.81
	Nagla Sikarwar	1	250.50	1.14	219.73
		2	330.00	1.42	232.39
		3	300.00	1.42	211.26
Aligarh	Kajrauth	1	340.00	1.57	216.56
		2	371.00	1.71	216.95
		3	325.00	1.42	228.87
	Karas	1	268.00	1.14	235.08
		2	340.00	1.42	239.43
		3	272.00	1.14	238.59
	Kaimthal	1	262.00	1.14	229.82
		2	410.00	1.71	239.76
		3	337.00	1.57	214.64
Mathura	Mahaaban	1	478.50	2.28	209.86
		2	235.00	1.00	235.00
		3	361.00	1.57	229.93
	Jataura	1	353.00	1.57	224.84
		2	542.00	2.42	223.96
		3	367.00	1.71	214.61
	Manoharpur	1	741.00	3.00	247.00
		2	592.00	2.47	239.67
		3	622.00	2.47	251.82
Firozabad	Narkhi	1	*	*	*
		2	77.50	0.38	203.94
		3	*	*	*
	Kathfauri	1	450.00	2.00	225.00
		2	565.00	2.57	219.84
		3	393.50	1.71	230.11
	Bamai	1	837.00	3.42	244.73
		2	480.00	1.90	252.63
		3	1012.00	4.00	253.00
Etah	Jinawali	1	606.00	2.47	245.34
		2	666.00	2.71	245.75
		3	632.00	2.71	233.21
	Churthara	1	1020.00	4.00	255.00
		2	478.00	1.95	245.12
		3	753.00	3.00	251.00
	Nagla Badha	1	396.50	1.61	246.27
		2	561.00	2.42	231.81
		3	530.00	2.28	232.45

\* = Crop not available

**RESULTS AND DISCUSSION**

The highest production of onion was noted 1020 qt./ 4 acr at first field of village Churthara of district Etah while; the lowest production was noted 77.5 qt./ 0.38 acr at second field of village Narkhi of district Firozabad. On the other hand, the highest productivity of onion was noted as 255 qt./ acr at first field of village Churthara of district Etah; while the lowest productivity was noted as 203.94 qt./ acr at second field of village Narkhi of district Firozabad. (Table 1). In my survey of Village Narkhi, I found only one farmer who was farming the onion crop.

The highest production of chilli was noted 2135 qt./ 8.57 acr at first field of village Narkhi of district Firozabad while; the lowest production was noted 65.5 qt./ 0.42 acr at second field of

village Jinawali of district Etah. On the other hand, the highest productivity was noted as 254.01 qt./ acr at second field of village Narkhi of district Firozabad while; the lowest productivity was 155.95 qt./ acr at second field of village Jinawali, district Etah. There are not present the chilli crop in first field of Village Jinawali, Etah. According to the survey, Second and biggest producers of chilli are second field (production = 1740 qt./ 6.85 acr and productivity = 254.01 qt./acr) and third field (production = 1715 qt./ 6.85 acr and productivity = 250.36 qt./acr) of Village Narkhi, Firozabad. Thus, village Narkhi of district Firozabad is the biggest producer of chilli in Western Uttar Pradesh (Table 2).

**Table 2:** Production of chilli in Western Uttar Pradesh

District	Site		Chilli		
	Village	Field	Production (quintal)	Area (acre)	Productivity (qt/acr)
Agra	Garhi Vichitra	1	360.00	1.71	210.52
		2	285.50	1.33	214.66
		3	270.50	1.33	203.38
	Barara	1	538.00	2.57	209.33
		2	950.00	4.57	207.87
		3	325.00	1.71	190.05
	Nagla Sikarwar	1	410.00	2.00	205.00
		2	835.00	3.71	225.06
		3	775.00	3.71	208.89
Aligarh	Kajrauth	1	425.50	2.48	171.57
		2	450.00	2.48	181.45
		3	300.00	1.71	175.43
	Karas	1	325.00	2.00	162.50
		2	350.00	1.95	179.48
		3	250.00	1.42	176.05
	Kaimthal	1	410.00	2.28	179.82
		2	320.00	1.71	187.13
		3	255.00	1.42	179.57
Mathura	Mahaaban	1	379.00	2.28	166.22
		2	358.00	2.00	179.00
		3	399.00	2.28	175.00
	Jataura	1	445.00	2.57	173.15
		2	295.50	1.71	172.80
		3	415.00	2.28	182.01
	Manoharpur	1	199.50	1.14	175.00
		2	203.50	1.14	178.50
		3	233.00	1.42	164.08
Firozabad	Narkhi	1	2135.00	8.57	249.12
		2	1740.00	6.85	254.01
		3	1715.00	6.85	250.36
	Kathfauri	1	593.00	2.47	240.08
		2	935.00	3.80	246.05
		3	895.00	3.71	241.23
	Bamai	1	320.50	1.33	240.97
		2	233.00	1.00	233.00
		3	295.00	1.44	204.86
Etah	Jinawali	1	*	*	*
		2	65.50	0.42	155.95
		3	68.00	0.42	161.90
	Churthara	1	95.00	0.57	166.66
		2	180.00	1.14	157.89
		3	162.00	1.00	162.00
	Nagla Badha	1	120.50	0.76	158.55
		2	130.00	0.76	171.05
		3	93.50	0.57	164.03

\* = Crop not available

**ACKNOWLEDGMENT**

The authors are highly thankful to the Principal, Agra College, Agra for providing essential laboratory facilities during the research work and to Council of Science and Technology, Uttar Pradesh (C.S.T.,U.P.) for financial support.

**REFERENCES**

1. Chandra M. and Rana K.S. (2014): Production of onion (*Allium cepa*) and chilli (*Capsicum annum*) of some villages in western Uttar Pradesh: A survey Report. *Nature & Environment*, 19(1): 59-62.
2. Jagtap P.P., Shingane U.S. and Kulkarni K.P. (2012): Economics of Chilli Production in India. *African Journal of Basic & Applied Sciences*, 4(5): 161-164.
3. Raju K.V. and C.K. Luckose (1991): Trends in area, production and exports of chillies from India. *Agric.Sit. in India*, 45: 767-772.
4. Rajur B.C., Patil B.L. and Basavraj (2008): Economics of chilli production in Karnataka, Karnataka J. Agric. Sci., 21(2): 237-240.
5. Olayiwola O.O. (2013): Economics of cassava cultivation and its competing crops in Ibadan Metropolis, Oyo State, Nigeria. *ABHINAV- International Monthly Journal of Research in Management and Technology*, 2(6): 17-24.