



Survey of Needs and Priorities for Saffron Research and Development

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In the past year, growers across the US have expressed interest in cultivating saffron as a high value crop to supplement current production. An internet list was established in March 2017, and now has 346 subscribers from across the US and Canada, as well as several international participants. A survey among subscribers was conducted in Jan-Feb 2018 to identify grower needs. Seventy four responses were received (21% response rate), representing 19 different states, Quebec, Canada and Saudi Arabia. Around 20% were home gardeners, 15% were commercial vegetable or herb growers, 11% were commercial ornamental growers, and 37% intend to become a commercial grower in the future. Around 77% of the respondents grew saffron in 2017. Of these 27% planted less than 500 corms, while 7% planted between 10,000-20,000 (Table 1). Most planted between 500-2,000 corms. Nearly 57% of the respondents grew saffron in the field, either in the ground or in containers (Table 2). Around 21% grew saffron in a protected environment, either in a greenhouse, high tunnel or low tunnel. Most of the respondents (36%) produced less than 0.05 grams of saffron in 2017, though 5% harvested between 2-5 grams (Table 3).

Over 45% of the respondents intend to grow saffron in the future on 1/8 of an acres or less; 36% intend to grow on 1/4 acre- 1/2 an acre; 16% intend to grow on 1/2 acre or more of land (Fig. 1). When growers were asked what would help them with production, growth, and marketing, the three topics that were identified as the most helpful were information on pest, disease and rodent management; information on soil fertility; and maintaining the website on saffron (Table 4).

Table 1. How many saffron corms did you plant in 2017?

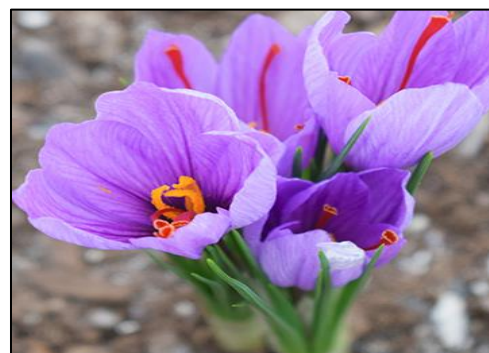
Quantity	%
None	22.97
Less than 500	27.03
501-1,000	17.57
1,001-2,000	13.51
2,001-3,000	5.41
3,001-5,000	2.70
5,001-10,000	2.70
10,001-20,000	6.76
More than 20,000	1.35

Table 2. How do you currently grow saffron?

Growing method	%
I do not grow saffron	20.27
In the field in the ground or raised beds	47.30
In the field in containers (eg., milk crates, pots, etc.)	9.46
In a greenhouse in containers (eg., milk crates, pots, etc.)	9.46
In high tunnels in the ground or raised beds	4.05
In high tunnels in containers (eg., milk crates pots, etc.)	4.05
In low tunnels in the ground or raised beds	4.05
In low tunnels in containers (eg., milk crates, pots, etc.)	0
Other production system (specify)	1.35

Table 3. How much saffron did you produce in 2017?

Yield	%
None	22.97
Less than 0.05 oz. (1.4 grams)	36.49
0.05-0.25 oz. (1.4-7.1 grams)	24.32
0.26-0.5 oz. (7.4-14.2 grams)	2.70
0.51-1.0 oz. (14.5-28.3 grams)	4.05
1.01-2.0 oz. (28.6-56.7 grams)	4.05
2.01-5.0 oz. (57.0-141.8 grams)	5.41



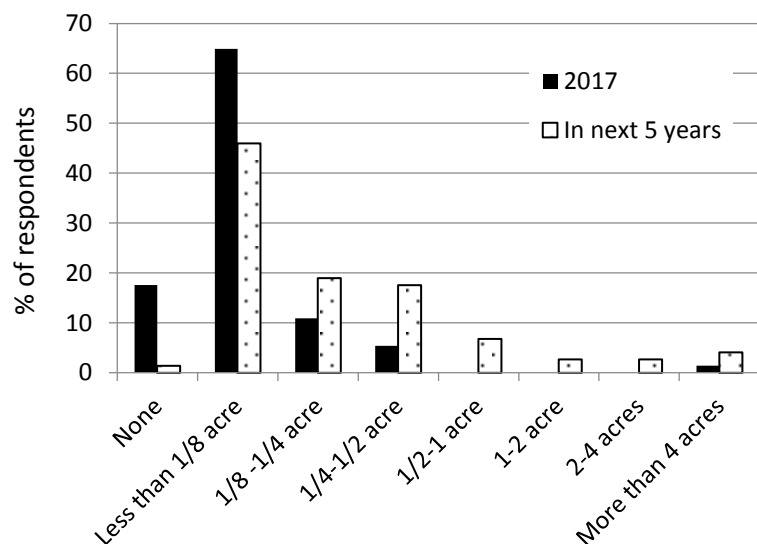


Fig. 1. Area on which saffron was grown in 2017 and projected for next five years, (% of respondents).

Table 4. How useful are these subjects or services for helping you grow, process or market saffron? (1 = not needed; 5 = very helpful) (% of respondents)

Subjects or Services	1	2	3	4	5
Guidelines for saffron growing in the field	2.8	4.2	9.7	13.9	69.4
Guidelines for saffron growing in low tunnels	12.5	8.3	18.1	9.7	51.4
Guidelines for saffron growing in high tunnels	15.9	7.3	20.3	8.7	47.8
Guidelines for saffron growing in greenhouses	24.6	9.2	15.4	7.7	43.1
Information on field preparation before planting	2.9	2.9	11.6	8.7	74.0
Information on soil type	4.1	4.1	9.6	12.3	69.8
Information on soil fertility	1.4	1.4	12.5	9.7	75.0
Information on irrigation/watering	2.7	1.4	16.4	13.7	65.8
Information on pest, disease and rodent management	1.4	0.0	4.1	16.4	78.1
Information on weed management	4.2	4.2	12.5	11.1	68.1
Guidelines on saffron harvesting	2.8	2.8	12.5	9.7	72.2
Guidelines on saffron drying	1.4	4.2	12.5	11.1	70.8
Guidelines on saffron storage and packaging	1.4	4.1	9.6	12.3	72.6
Information on saffron quality analysis	4.2	5.6	11.1	13.9	65.1
Guidelines on saffron corm production	4.1	2.7	14.8	17.6	60.8
Information on local market opportunities	2.8	5.6	11.1	12.5	68.1
Information on national market opportunities	7.1	11.3	19.7	16.9	45.1
Information on culinary uses	5.5	11.0	16.4	20.6	46.6
Information on medicinal uses	4.1	8.2	11.0	19.2	57.5
Information on saffron value-added products	4.3	7.1	15.7	14.3	58.6
Establish a saffron cooperative for marketing	7.1	7.0	23.9	16.9	45.1
Hold regional workshops on saffron	4.2	2.8	22.2	16.7	54.2
Hold demonstration events on saffron	4.2	7.0	22.5	25.4	40.9
Hold web-based sessions on saffron	2.9	5.8	18.8	23.2	49.3
Prepare factsheets on saffron subjects	2.8	1.4	11.3	23.9	60.6
Maintain internet list of saffron growers/researchers	2.8	1.4	11.1	23.6	61.1
Maintain website on saffron	2.7	1.4	12.3	9.6	74.0

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