AT VINEIAND HORTICULTURAL EXPERINENT STATION, ONTARIO

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\text { July 24, } 1948
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; Professor E.F. Palmer greeted nineteen enthusiastic members and friends of the North American Lily Society at Vineland, Ontario, July 24, 1948. The day was unusually favorable as to weather and those with cameras had an excellent opportunity to get records of outstanding lily plantings.

The president, Dr. L. H. MacDaniels, made a brief statement about the progress reported and the action taken at the Boston meeting. A thousand copies of the yearbook had been ordered and would be ready in about a month. The relationship to the American Horticultural Society was not yet clarified at this time. Meanwhile the Nassachusetts Horticultural Society had granted the Lily Society many favors. He spoke of the possible development of regional groups, Canadian, North Atlantic, South Atlantic, Central and West Coast; of the Society Kodachrome collection; of Seed Exchange; of the expectation that the Society would be in a position to put out bulletins from time to time. In all these, the Society needs the active cooperation of its members.

Professor Palmer welcomed the group to his gardens, saying that more persons had been expected, but due to Mr . Palmenter's absence, publicity about this meeting had not been obtained. Turning to the lilies, he said the lily breeding was his own. None had been introduced, so he did not yet know the value of any. He had been hybridizing for only 15 years, while Miss Preston (who was present) had been breeding lilies 30 years, and knew her stuff.

Professor Palmer started with the trumpet lilies, I. regale, Sargentiae and sulphureum. He used Crow's hybrids, seedlings of Sargale, etc., but always involved the three original forms. His aim was to get these characteristics:

1) late season; 2) cream or sulphur in the trumpet; 3) vigor with hardiness, and 4) possibly bulbil formation. The last, bulbil forming, proved not to meet with the other specifications and so was discarded. Now the resulting forms are very vigorous and some are ready for introduction.

In another line, started ten to twelve years ago, he crossed. L. croceum with L. umbellatum mahogany and got a superior form of umbellatum which for his own use was called "Crohog." This was the start of the color when used as seed parent with diploid tigrinum pollen. Progeny often carried bulbil formation from the pollen parent. Another combination involved L. Willmottiae with tigrinum pollen, giving progeny that was intermediate in form and season, had fine vigor and constitution along with ability to form bulbils.

A group now past bloom, intermediate in characteristics, with high color, combined umbellatum, philadelphicum, amabile, and Preston hybrids along the way.
I. $x$ Crimson King, a hybrid of L. Davidii x Edna Kean produced by Mr. Palmer's brother, had been crossed with "Crohog" to give a surprisingly good population with flowers usually facing out.
L. Willmottiae x tigrinum crossed with L. Willmottiae x Preston hybrids gave good material of bright lively color, with up facing flowers of the L. X Spitfire type.

A good population just coming into bloom resulted from a backcross on L. Henryi of aurelianense seedlings. The cross in the other direction was less effective and fewer seedlings resulted. The aurelianense cross gave more variations than Professor Palmer had from using the Havemeyer lily.

With such clear preliminary remarks, the group moved into the field about 10:45 a.m. to see the hybrids, many of which were in their prime. All had been well labeled and were readily observed and much admired. One especially fine clon out of L. Willmottiae X L. tigrinum had a very tall spike on a bulbil-producing stem; it is a possible introduction under the name "Viking." Very attractive were some strong
clons with sulphur or cream flowers coming from the trumpet lilies. These also are ready for introduction soon.

In a general discussion of cultural methods Professor Palmer gave some idea of his technique. Seeds go into flats in the greenhouse by mid-February. In middle June, he lifts out the whole row with the soil by using a knife, puts it out into the bed, a little deeper than the flat. The plants are left through the next season for any bloom indications. These beds (raised) are mulched with half-rotted barnyard manure, as are the older plants. In early stages, the plants are left close together to see if good. The first fall after blooming, if the family proves good, he tries the plants in rows 18 inches apart, with bulbs 6 inches apart in the row, to give each bulb a chance. All beds have a manure mulch on top which is never dug in, but goes into humus. The technique is to feed from above and cool at the same time. He prefers an undisturbed soil.

Professor Slate suggested that he had started with reliable lilies from which to develop his hybrids. Professor Palmer said this was true and they were improving under treatment. He believed in starting with easy material with the objective that the amateur should have inexpensive bulbs and be able to keep them. He called attention to the raised beds with good surface drainage, saying that the bulb could stand cold but not wet.

Dr. NacDaniels said I. canadense and I. superbum were the only two lilies that could stand in wet.

Professor Palmer observed that regal lilies on the Pacific coast were like L. candidum; one would lose them if they were too deep.

Mr. Byam said with a raised bed and light sandy soil, nineteen out of twenty lilies would do well.

Asked about shade, Professor Palmer said lilies stood some as a rule; not under a maple, however, where there was too much root competition.

Professor Slate suggested 5-10-5 fertilizer for stem roots. He uses saw-
dust as a mulch and it is necessary to supply nitrogen. A two-inch layer is good, if possible. For a winter mulch, truckloads of leaves obtained from the city for November and December use cut weeding in Nay and June. Professor Palmer indicated that perennials prefer undisturbed soil.

Mr . Avery asked if there had been experiments with lilies and their use of boron and such elements, to which Professor Slate replied that there had been little work on mineral fertilizers. For experiment, clonal stock would be necessary and it was too scant so far. One could get away from minor elements by using organic matter.

Nirs. Ford asked if tobacco clippings were good. In Pittsburgh these were given away by tobacco concerns. Dr. NacDaniels said that the lily virus and tobacco virus were different, fortunately, since the latter was a very tough one, even more resistant than lily mosaic. He mentioned soil acidity as varying for different lilies.

Mr. Byam asked about a good list for those beginning to grow lilies. He was referred to published lists by Professor Slate and others.

The following signed the roster for this meeting:
Avery, Mr. and Mrs. Volney A. S. Andover, New Jersey
Beattie, Frank. R. R. 3, Dundas, Ontario
Byam, P. M. 39 Grandview Avenue, Toronto 6, Ontario
Castle, Minerva S. Meadowvale, Ontario
Ford, Mr. and Mrs. Lewis A. 2501 Greensburg Pike, Pittsburgh 21, Pennsylvania .
Hardman, Eric H. Burlington, Ontario
Inskip, Mr. and Mrs. Warren L. Hamburg, New York
Irving, Mrs. O. Toronto, Ontario
MacDaniels, I. H. 422 Chestnut Street, Ithaca, New York
Pfeiffer, Norma E. Yonkers, New York

Preston, Isabella. Georgetown, Ontario
Slate, George L. Geneva, New York
Tuthill, Mrs. M. Toronto, Ontario
Watson, James M. 22 Rowley Circle, Toronto 12, Ontario
Wildrick, Mr. and Mrs. George. Elmira, New York
Winter, E. N. Meadowvale, Ontario
Socially, the pleasure of the day was increased by a picnic luncheon eaten in the garden of Professor and Mrs. Palmer, who served coffee and sweet cherries. All who attended the Field Day felt better acquainted and gained much from the informal contact with such authorities as Miss Preston, Professor Palmer, Professor Slate and Dr. MacDaniels. With expressions of appreciation to a most generous host, the group separated to return by train, plane or auto to their own lily domain with renewed interest.

Respectfully submitted,
Noma E. Geffen

