Reichenb.—is believed to have been introduced from Europe. Its range was first reported in the immediate vicinity of Syracuse, New York, and later Buffalo, New York, and Toronto, Ontario. A more recent study shows it occupies a wider but limited range and is rare in each locality where found.[1]

Since *Serapias Helleborine* was first observed in the vicinity of Syracuse, the only region of the eastern United States where the hart tongue fern, *Scolopendrium vulgare,* grows, botanists suspected that its distribution would be limited to the same general areas. The orchid, however, has been a persistent invader of new areas in central New York, rapidly increasing as it adapts itself to the environment. Especially is this true in the Cayuga Lake Basin, where *Serapias Helleborine* was rare 15 years ago but to-day is a rather common plant, growing from roadsides to deep woods.[2] During the past year, 1932, this orchid has invaded in large numbers highly diversified areas both in natural and cultivated habitats in central New York. One of the areas invaded was a highly domesticated habitat in a residential district of Syracuse. This habitat, a heavy, sodded, well-kept residence lawn, supported seven vigorous plants approximately 2½ feet tall. These plants were growing in four unusual positions in the lawn, which saved them from the cutting blades of the lawn mower until their growth revealed a pleasing form to the eye of the caretaker, who permitted them to grow unmolested. Three of the above plants were growing in a very heavy lawn sod slightly higher in elevation than the surrounding ground. One grew in the shade of a hedge, where its roots mingled among those of the hedge plants, and three in close contact with a cement walk. These plants all produced many blossoms and a heavy seed setting followed. According to the statement of the property owner, this is the first season this plant has appeared in the lawn or in the immediate neighborhood. This observation covered a period of 25 years. Another interesting appearance of *Serapias Helleborine* this year for the first time was in a residential area on the shores of Cazenovia Lake, 16 miles east of Syracuse. Here the orchid grew abundantly in the back yard of a summer home. Furthermore, it has been found growing abundantly the past season in the bottomlands of various lakes in the vicinity of Syracuse, where in the past it occurred only sparingly.

The finding of this once rare orchid growing so luxuriantly in domesticated, as well as in natural habitats, is indeed interesting. If the present year's distribution is a reliable criterion for the future, flower lovers of central New York may realize a lifetime desire and see orchid plants as abundant in their back yards as some of the more common plant species of the region. This assumption may be purely speculative, however, since so many factors not fully understood may play an important rôle in the growth and distribution of an orchid species in a specific region during any particular year. Nevertheless, the occurrence of *Serapias Helleborine* in domesticated habitats definitely indicates that it may ultimately adapt itself to such environments. With this in mind, the writer as well as others interested in the distribution habits of this plant gathered its seed during the present year, to be scattered and planted in such cultivated habitats as lawns, flower plots and shrub areas. In addition, the seeds have been sent to individuals in various regions of the United States in the hope that more information relative to its environmental demands and adaptations can be gathered.

Serapias Helleborine is not as spectacular in its beauty as several other species of the Orchidaceae; nevertheless, the tall leafy stem with its dense-flowered raceme is very attractive. Therefore, should this orchid prove itself to be adaptive to widely divergent habitats, nature will have again added an attraction to the home lot.

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[1] Gray's Manual, 6th and 7th editions; also Britton and Brown, 1st and 2nd editions of "Illustrated Flora of the Northern United States and Canada."

[2] A report from Dr. A. J. Eames, of Cornell University, Ithaca, N. Y., in personal correspondence.

I-INOSITOL IN CITRUS FRUITS

IN the isolation of ascorbic (hexuronic) acid from citrus fruits there is always obtained a residue insoluble in methyl alcohol which can be recrystalized from water.

This substance melts at 225–226°. A mixture with i-inositol gives no depression in melting-point, and the optical-crystallographic properties are identical with those of i-inositol. The optical-crystallographic properties of anhydrous i-inositol, recrystallized from water at the temperature of the boiling-water bath, were found to be as follows: substance occurs as irregular colorless fragments when crushed for study by optical-immersion method. The indices of refraction are: $\alpha = 1.525$, $\beta = 1.555$, $\gamma = 1.570$, all ± 0.003. The double refraction is strong, $\gamma - \alpha = 0.045$. Biaxial interference figures common; optic sign −; 2 E not large.

The yields of i-inositol from ten liters of juice were as follows: Lemon = 1.24 g., orange = 0.47 g., grapefruit = 0.28 g.

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