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Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

SAM CALDWELL

ROUTE 4 • HOLT ROAD  
NASHVILLE 11, TENNESSEE

February 18, 1961

Dear Ben:

Surprise! I've come to life again. There's no point in my wasting words to excuse my inexcusable delays. An Atlanta newspaperman who was a semi-invalid throughout his life once wrote, "I'm sick and tired of being sick and tired." And that's the way I have felt much of the time through the past winter. But actually, I'm not so bad off, really, so don't be concerned about me. Just be tolerant when I go for months without answering nice letters that I value highly and that really deserve quick replies. I'll try to do better. Now for a little catching up:

<sup>The lycoris, I mean - not the picture.</sup>  
First, as for the enclosures--I'm sending you a black-and-white print and a Kodachrome that I made of your "White #1" lycoris. I think it is a fine thing. I'll admit that the slide is under-exposed. I always make three shots at different exposures and then pick out the best slide to keep. Now I'll even admit that I have another slide of this that is just about right, but it goes in my "lecture" set; I'm selfish enough to keep the best one for myself. But the one I'm sending isn't too much off. The print, of course, is just as good as I know how to make.

Then I thought you might like to look over some 1960 lycoris notes I finally got together for Dr. Traub--too late, by the way, to get into the 1961 *Herbertia*, but he wrote that he is saving them for the next volume. My carbon of these notes is typed on both sides of the pages, so may be a little confusing unless you check the page numbers. But these notes will save me a lot of extra typing, as I would otherwise report some of the same things to you in a letter.

Now to clear up all sorts of oversights--

Mrs. Fort's address is Mrs. Rufus E. Fort, Sr., Royal Oaks House, 4505 Harding Road, Nashville, Tenn. I did forward her the azalea folder last fall but blush to think that I didn't simply return her address to you on the card you enclosed. I kept thinking, "Why I'm going to write Ben a long letter, tomorrow, so . . ." Maybe I have some Spanish blood, with those thoughts of "mañana."

The Barry's letter (returned herewith) interested me very much. Strangely, I have never heard of these people, though I know lots of the bulb fanciers in Louisiana. I am going to write Mrs. Barry, as that "new species, unknown to Dr. Traub, large-flowered salmon," sounds most interesting. I have no idea how they might have come out of China. But that paragraph about an *Albiflora* renamed *Woodii* is nonsense. Some years ago the late Wm. T. Wood, of Macon, Georgia, pollinated some blooms of *L. traubi* with pollen from *L. radiata*. Eventually the hybrids (?) bloomed and turned out to be yellow, like the seed parent, *traubi*. But Dr. Traub seems quick to christen things and he called them *L. woodii*, for Mr. Wood. I have never seen them but I suspect that they were merely accidentally selfed *traubi* seedlings. I don't think Mr. Wood had anything but the usual sterile form of *radiata*, which, in my experience at least, doesn't do any hybridizing.

Now I have your January 30 letter before me, and will use it to guide me. You refer to my "impeccable" typing. Now Ben, if you could just see me here at the old Underwood, with two fingers on my right hand flying back and forth and one finger on the left operating the shift, you would see that I do the most "peckable" typing imaginable.

But just to clear up things, if I don't underline botanical names or capitalize uniformly or use an "i" ending sometimes and "ii" at other times in letters such as this, in some cases it's because of my ignorance. But mostly it's because I think you'll know what I'm talking about without my checking a type manual for the best usage.

No, I really didn't laugh when last summer you wrote that one of your *Traubis* looked like *sperryi*. After all, the *flowers* are not vastly different. I have never had them both bloom at the same time for direct comparison, but I think *sperryi* will usually run larger, taller, and more of an orange-yellow color than *traubi*. But the foliage is very distinct, both in appearance and in time of emergence (*traubi* in fall for me and *sperryi* in March). By the way, *sperryi* may not be important in the mild-climate areas. I sent Dr. Traub the only large bulb that I could get two years ago (other than three which I selfishly keep for myself). I sent it because he has the new *L. chinensis* (the Glenn Dale hardy yellow), and I wanted him to check to see if they are the same. But he wrote me in December that he has not been able to flower *L. sperryi*, and he thinks it may need more cold than he gets at La Jolla. But he thought from comparing the foliage that it is not the same as *L. chinensis*. I reached the same conclusion here, since Mr. Lee sent me a bulb of *L. chinensis*.

The three bulbs of *L. kiushiana* you sent me, planted in a deep box in my cold greenhouse, are now beginning to make robust growth, just as you report yours are doing. Also three or four *cinnabarinus* have pushed up foliage an inch or two high in the greenhouse. I think they must be close to *sanguinea*. Do you get *Baileya* from the Bailey Hortorium at Cornell? There is a story on "The Japanese Species of *Lycoris*" in the March 1959 issue, and *kiushiana* is described and pictured as an extra large variety of *sanguinea*.

Yes, *caldwelli* should be pushing up leaves just about now. Mine have little broad leaf tips just barely out of the ground; yours probably are a little farther along. And the same is true for *L. haywardii*, followed closely by *sprengeri*. *Squamigera*, too, is showing up here, and I would have guessed that all of these would come up down there two or three weeks earlier. *Incarinata* also is pushing out of the ground now. But *sanguinea* isn't due yet for a week or so, and last of all, *chinensis* and *sperryi* usually come out about March 10.

I fear this is going to be another poor year for the fall foliage types. We had some rough weather in December and January--the weather bureau says the coldest since 1940, though there were no extremely low temperatures. But many nights it was down to the range from 6 above to a low of 1 below zero. Leaves on *radiata* and *houdysheli* are badly burned. Worst hit of all are the *radiata-sprengeri* crosses, on which leaves were completely killed. This surprised me, as I expected them to be harder than straight *radiata*, since *sprengeri* is extremely hardy. I guess the explanation is that while *sprengeri* bulbs are very hardy, their foliage does not appear until late winter or early

spring, like squamigera, so their leaves are not used to the low temperatures of midwinter. When crossed with radiata they make hybrids which produce leaves in fall, like radiata, and then are extra sensitive to cold, as are sprengeri leaves.

The few elsiaes I left out in the open seem to be just about dead from the cold. Fortunately, a year ago I made a little coldframe with polyethylene plastic cover and planted most of my elsiaes, albifloras, etc.--the ones that always are hurt by the cold--inside the frame. Also most of my hybrids were shifted into it, including a majority of the radiata-sprengeri and reciprocal cross bulbs that I have. These seem to have come through with little damage. So I'm not really lost on the hybrids, though there's a pretty good chance that you'll beat me to a bloom, with your better growing conditions down there.

Regarding the time of appearance for sperryi foliage: as noted above, it comes late--in March for me--on adult bulbs. I don't quite know what to think of the seedlings; they have been erratic--some producing little blades off and on through the year at almost any time. Mostly I have started these in pots, and not even all in the same pot will act alike. I suppose when they grow up they'll settle down to the spring foliage habit.

Incidentally, in regard to your traubi seeds planted last fall and still unchanged: I think that is perfectly normal. Exactly the same thing has happened when I planted radiata seeds in fall and wintered the pots in my cold greenhouse. The seeds stay nice and plump and shiny down in the moist soil all winter; then as temperatures warm up in March and April they germinate and make little tear-shaped bulblets underground. No foliage shows up until the next fall--a year after seeds were planted. However, more than once I have kept some fall-gathered radiata and sprengeri seeds stored in moist sphagnum moss in my basement, where the furnace holds the temperature up around 70 degrees. Some of these seeds germinate and make bulblets within a matter of a few weeks, instead of lying dormant until the next spring. So it seems to be largely a matter of temperature.

I am interested in your mention of Iris histrioides major. For a number of years I had a nice little clump of this and also of I. bakeriana. They sometimes bloomed when we had a mild spell in late January. When they eventually disappeared I think it was because chipmunks or field mice ate them. Just today I noticed five little yellow buds pushing up on a small clump of I. danfordiae. They've escaped the varmints for ten years or more and are among the prettiest little things you could imagine.

Mostly I've been enjoying things in the little greenhouse. Camellias are blooming. A pot of Lachenalia aurea has been in bloom more than a month. There were nerines back early in the winter. Are they any good down there? If so, I'll send you several. I don't get 100% bloom, but get some every year and the bulbs apparently go on forever. My oldest were bought in 1941. I don't recall anyone growing them in Florida, so maybe they would rot in the humid summers on the Gulf Coast. One pot of Tulbaghia fragrans perfumed my greenhouse all through December. I think I recall seeing one that you had. Iris Darjeeling is blooming now and the wonderful hybrid clivias are showing buds. I have one that Cecil Houdyshel calls Clivia cyrtanthiflora. It's a dependable bloomer in January and the tubular flowers

come in a large umbel but droop downward. They last for weeks. Just coming into bloom now are some potted azaleas. I have a few that came some years ago from Germain's, out in Los Angeles, and I believe they are classed as Belgian indicas or perhaps just Belgian hybrids. Anyway, they make beautiful pot plants and are very satisfactory in containers, outdoors in summer and wintered in the cold greenhouse where temperatures get down almost to freezing. One of the better ones is Mme. Alfred Sanders--probably commonplace to you, but a novelty here where few people know the large-flowered types. I have been trying to locate a plant or two of the variety Albert and Elizabeth, a pink-and-white Belgian I used to see in Florida. But I haven't seen it listed lately.

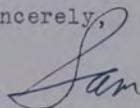
Do you do any good with Philadelphus down there? If so, I'll send you a small plant of one that was a minor sensation when the American Iris Society held its convention in Memphis several years ago. No one in attendance had seen such large flowers on a mock orange as on this one which was seen in several Memphis gardens. It is supposed to have come from an old garden in Como, Mississippi. The flowers give the general appearance of large white dogwood blossoms. I later acquired a plant and have rooted a half dozen cuttings, one of which I'll gladly send down if they do any good in that area. I have seen the rather nice collection of Philadelphus on the Penn State U. campus and do not remember any with such large blooms as this. Of course it could be a known variety that somehow got down into Mississippi years ago. It is a pity that these shrubs have only one season--the flowering time--when they are particularly attractive. Actually I do not remember seeing them as far south as you are now. Several varieties are grown around Shreveport.

I find that I've put in several questions above, which is something of an imposition, since it seems to take me many months to get around to answering anything. But I'll ask one or two more, so when you do have time to write, you could give me this information. Would you say that Lycoris traubi is really quite satisfactory and dependable there? I thought that it would be, if given reasonable care, anywhere from about Birmingham and Atlanta southward. But Elizabeth Lawrence, who is a wonderful person and gardener, apparently doesn't have much success with it at Charlotte. I have talked to her on several visits over there, the last one last September.

I have a trip scheduled to Baton Rouge for a daylily meeting in May and hope I'll be able to swing over to Pass Christian on the way back. But I don't know about the exact dates yet.

Probably those wonderful azaleas of yours are looking fine now--or soon will be, and the magnolias and everything else that at the Back Acres garden make each day a joy. Warmest regards to everyone. Do write again and I'll try hard not to wait 6, 8, 10 or more months before answering. Just don't get disgusted with me. Sometimes I'm embarrassed to think what people must think of my delays.

Yours sincerely,



P. S. Ben, this is written Monday morning, as I didn't get to the Post Office Saturday after writing everything above. Now I've just been checking over the greenhouse and come up with this thought:

Do you feel young and enthusiastic enough to be a nurse for what may be some exciting lycoris babies? In 1958 I was particularly fortunate in making some crosses involving sanguinea and the new sperryi with some of the older things--haywardi, radiata and sprengeri. Five or six pots are in my greenhouse now, full of healthy looking seedlings. Some crosses gave only four or five seedlings but others gave two or three dozen. Of course I expect to grow all of these along to maturity myself, but I believe you could beat me to bloom by two or three years with your growing conditions down there. When the bulblets go dormant this summer, suppose I send you three or four out of each batch. It will probably gain several years in our finding out whether these things really are hybrids or not--and that's much more important than my seeing them first.

Understand, the bulblets I send would be yours, in exchange for your growing them along to maturity to see what they turn out to be. If anything quite exciting should show up among them, you could eventually send me an offset back. This would also save time in our learning how they perform in different climates, too. We learn so slowly about lycorises that anything to speed up things should help. Let me know what you think of this idea. We shouldn't make it complicated, like some of those "guest iris" deals which result in people getting mad and falling out with each other. I know that both you and I are more interested in the advancement of horticultural knowledge than in who gets the credit for it. In the long run, all these "hybrid" lycorises that I think I have, may not be hybrids at all. I'm just getting tired of waiting to find out, and this would probably be one way of finding out quicker.

Yours,

*Sam*

P.S. #2 - After you've looked over the carbon of my "Lycoris Note - 1960," you might mail it along to Wynodden Hayward. I usually try to keep him posted on what I'm doing here, as he has been very nice about sending me bulbs.  
S.

5804 Camino de la Costa,  
La Jolla, Calif. 7-29-60

Dear Mr. Morrison,-

Many thanks for your letter of July 27 and the offer to send the Lycoris kiusiana bulbs, and as you can imagine I am much interested and will be pleased to have the bulbs for trial. I will report on them after they flower.

Your will remember the cross that you and your associate made, Lycoris radiata x L. chinensis. Dr. Creech sent samples for trial here, and two of the seedlings have flowered this season. They are most interesting since I believe that your cross will throw much light on the origin of the Lycoris straminea alliance of species. The two seedlings that have bloomed opened a cream color from buds that were tinted pinkish on the outside. After opening they were practically a cream color without any pinkish tinting, but in a few days they developed the pinkish tinge. In size they are intermediate between the two parents, and much resemble the species in the L. straminea alliance. Stock will be sent to Dr. Flory and his associates for a chromosome study which will be correlated with that of similar species. Thus your pioneer work in crossing Lycoris will bear important fruit.

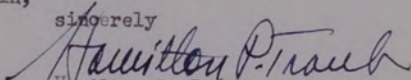
clone 'Elizabeth Traub'

How do the hybrid Crinums do with you. I have a cross, /C. 'Ellen Bosanquet' x C. scabrum, which I made in Florida many years ago. There it did not grow too large. Here it grows to enormous size, up to 6 feet or higher. I had planned to send you a start of this but thought it best to find out first if you would be willing to accept it.

I am breeding xCrinodonnas (syn. Amarcrinum). These as you know are crosses between Crinum and the Cape Belladonna and other Brunsvigias. You most likely have the clone 'Fred Howard' (syn. xCrinodonna (Amarcrinum) howardii). I have made a number of crosses with other Brunsvigia species and these are coming along nicely so that we can expect quite an array of xCrinodonnas in the near future. If you are interested I will send some to you for trial when they are ready in a few years. Brunsvigias cannot be grown in the Southeast but these will thrive there.

With kindest regards, I remain,

sincerely

  
Hamilton P. Traub

SAM CALDWELL

ROUTE 4 • HOLT ROAD  
NASHVILLE 11, TENNESSEE

October 19, 1960

Dear Ben:

It is always wonderful to hear from you. I simply wish we lived closer together, because I am a slow typer, and there are just too many things to write about to cover them all in a letter.

First of all, I'll explain that yesterday I had time to do a little packing and mailing, so I sent a few odds and ends of plant materials to several nice people, including you. One of the boxes, with an almost identical list of contents as yours, went to a young nurseryman I met in Houston last fall. He seemed to be a very fine plantsman with an interest in rare plant materials. So I sent him several things that he seemed to be interested in. And I also wrote a long letter, covering the items sent. Now maybe you'll think I'm a loafer, but rather than write all that stuff again, I'm just enclosing for you a carbon of my letter to him. It covers almost exactly the same things I sent you, and will explain, for instance, what I meant by sending those woody sticks with the green shoots. They are simply cuttings of the Chinese Trumpet Vine. I thought you might like to try rooting them. I would have sent rooted plants but have none except cuttings like these I sent you, which were put in sandy soil two months ago.

Some of the things I sent may be duplications of what you have or perhaps items that don't interest you. But I thought you should have the lycorises. I am terribly sorry I can't get you a big, flowering bulb of *L. sperryi*. But the few people here who have them won't part with them at all. I think I sent you a tiny seedling some time ago. I think you deserve better than that, so I sent two more seedlings--the largest out of a group of 13 I got from seeds planted in October, 1958. Besides wanting you to have them, I have an idea they will reach maturity much faster down there than here. So we will all be able to learn something about the time required to bring them along to blooming size.

For a time I figured that our *L. sperryi* would turn out to be exactly the same as USDA L. #162443 species growing up at Glenn Dale (now named "*L. chinensis*?"). But I gather from some material in Dr. Traub's 1960 *Amaryllis Year Book* that the fellow who has been spying on lycoris chromosomes over at the University of Virginia's Blandy Experimental Farm has found some differences. As far as I know, the two have never flowered together to provide an opportunity for direct comparison, but I am hoping this event will occur right here in my own planting this year. Anyway, *L. sperryi* is quite a lycoris, and I hope these little bulbs will grow fast for you.

The other lycoris bulb I sent you may be true *L. albiflora*. I got it under that name in 1955 from Noel Morey, then of Aptos, California, with the note: ". . . from Mr. O. E. Orpet. . . evidently are fertile, too, as Mr. Orpet says he grew them from seed and they are probably not in commerce." I planted them outdoors and they



turned out to be too tender to take our winters. Foliage was always damaged; the bulbs never flowered for me and deteriorated so much that when I dug them last fall they were nearly all gone. I'm sending Mrs. Evans one, too, and keeping the last two tiny ones in a pot myself. If they're fertile, they might turn out to be valuable in hybridizing. I imagine they'll be OK outdoors down in your balmy climate.

My letter to Mr. Lapetina mentions *L. haywardi* and *L. houdysheli*, but I think I have previously sent you those, so did not include them this time. I did send him one of each, as I'd like to know how well they do in the Houston area.

The bulbs of the two white lycorises (#1 and #2) arrived from you in perfect condition and have been carefully potted in large, deep pots. I'll be interested, as always, in what they give in the way of flowers.

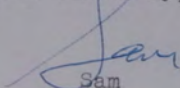
As you did, I also bought a few bulbs from Growers Exchange in Farmington, Michigan. Some of the things were too dried up to survive, but others are growing. My order, like yours, included some bulbs of *L. cinnabarina*. They were rather dried up, but were exactly like some Mrs. Evans had previously given me. All probably came from Van Tubergen. Both batches of mine made very little top growth, but by exploring carefully I have found that they've rooted strongly. So eventually I should know something about them.

I'm sorry to say that my health has been somewhat below par this year. With illness in the family, too, (both my parents live with me and are well up in years), things have been difficult at times. But the plants--and weeds--grow as usual. It won't be long now till I find lycoris buds pushing up. So things are not too bad, after all.

Please--don't let American Hort get away and wander North. It needs you.

Best regards to you and Andy and all the "Back Acre" connections.

Yours sincerely,



Sam

SAM CALDWELL

ROUTE 4 • HOLT ROAD  
NASHVILLE 11, TENNESSEE

August 27, 1960

Dear Ben:

At last a letter. I'm always trying to catch up with the world and the various things I should do, but just never quite make it. I hope you understand that, and will overlook long silences.

Actually, it's been a rather nice summer here--more rain than usual, so things have looked good. But there have been more grass and weeds to cut, of course. Daylilies, by the way, bloomed late but wonderfully well here this year. I made 10 big 4 X 5 Ektachromes of some of Geddes Douglas's new seedlings. I think there is a possibility that some of these will eventually find their way to market.

Now to catch up with some of the things in your letters, which, by the way, I enjoy very, very much.

My metal labels are strictly home-made. I like to work with tools and have a fair farm workshop. Frankly, I think these labels are very practical--good enough for a small nursery operation and ideal from my standpoint. They are cheap, not too conspicuous, and should last a lifetime. Best of all, whenever you can find the label, you can still read it. I get from the Sears store what they call "Aluminum Valley Roll," which is sheet aluminum, .019 of an inch thick. I get a roll 14 inches wide and ten feet long for a little under \$3.00. Then, as I need labels I just cut this sheet aluminum up into pieces an inch wide and 3 inches long. I mark the proper intervals with a ruler, scratch lines with an ice-pick held against the ruler and then cut along the lines with ordinary metal shears. The aluminum is softer and easier to cut than sheet iron. Usually I take a stack of about 20 label blanks at a time, clamp them together in a vice and drill a hole through them all, near one end, with my electric drill.

For writing on the labels I use a little gadget called a Burgess Vibro Tool, for which I paid \$7.50 in 1946, and it's still going strong. I checked locally and find that the price of this tool has also gone strong; it is still sold in some of the hobby and craft shops to use for embossing leather, metal and other materials, and costs \$14.95. A Tandy Leather Company store in New Orleans carries them, I am sure. The Vibro tool has several kinds of points. I use a blunt, rounded one and just hold the tool in my hand and write on the aluminum with it as you would with a fountain pen. The little point vibrates up and down very fast and embosses a line in the metal. So that's the label story.

Thank you so much for the Lycoris kiushiana bulbs. Anything new in the lycoris line is always a special treasure to me. I am returning the Yashiroda pictures, and quite frankly, they do look pretty much like what I have for *L. sanguinea*, at least in form. I can't tell about the size or color. I had 13 scapes of *sanguinea* this year and they're setting lots of seeds now. I don't think their color is very pretty and they fade badly, too. But they could be

better in other localities. I tried to match the color on my Nickerson Color Fan (perhaps you have one). None of the Munsell hues matched the lycoris color exactly, but those grown in shade were nearest to "strong yellowish pink, 10R 7/9," and those with stronger light were close to "strong reddish orange, 10R 6/12."

Do you have the Traub-Moldenke book, *Amaryllidaceae: Tribe Amaryllidae*? The description of *L. sanguinea* in it, with "blood-red-scarlet" flowers doesn't fit mine at all. On the other hand, there is listed a *L. sanguinea* var. *cyrtanthiflora* with "flowers apricot-colored, bleaching in the sun to a gray color," which is a pretty fair description of mine.

As for the other two Yashiroda pictures: I think you are quite right in saying his aurea looks like traubi. But that is to be expected. I think all the "aurea" bulbs coming out of Japan now are traubi. Even our Woolworth stores here sell them--for 19¢--as "yellow spider-lilies. Actually, I think it is a better lycoris than the St. Augustine aureas, but unfortunately, not quite hardy enough for outdoor planting here.

It's hard to tell much about Yashiroda's albifloras, but they look pretty much like the ones in the trade here under that name, the "peachy-pink" form of which Dr. Traub christened "*L. elsiae*." I think they are extremely pretty too, but again, they're sparse bloomers for us here, as the foliage is hurt by the cold every year.

That brings up your "White No. 1" and "White No. 2." Did you actually grow those bulbs there at Pass Christian? They were such fine, fat ones. All three of the No. 1's bloomed and they are wonderful. Really I think you have something there--though I don't know what. I feel sure that Dr. Traub might bestow a new name if he were to see it. The three bulbs you sent appear to me to be a clone; blooms were uniform and identical in form and color--somewhat on the *elsiae* color scheme upon first opening, but more a yellow-pink, with the pale yellow almost taking over as the flowers age. The form, though is distinct from and, to my way of thinking, better than, that of *elsiae*. Your No. 1's have broader segments, making a larger appearing flower, and the segments roll backward and curl under very gracefully, while *elsiae* segments are narrower and less curled at the tips. Seriously, if you have extra bulbs of No. 1--and if the entire stock is uniform with the ones sent me--I think it might be a good idea to send a couple to Dr. Traub--to get his opinion, at least. But use your own judgment. Incidentally, do you mean that you just bought these originally in a New Orleans store as "white" lycoris? They do fade practically to white, though it seemed to me that a little of the creamy-yellow tint remained.

The No. 2 is just now in peak bloom; that is, there is just one scape, but it is a good one. I cannot be sure, because none of my *elsiae* are in bloom right now (they are the albiflora type from Guille and others), but I have compared my pictures very carefully with your No. 2, and it does seem to me that they are very close, if not identical. No matter what, it is a pretty lycoris. But I think the No. 1 is really outstanding. I tried cross-pollinating No. 1 with several species that happened to be open and also selfed it, but, of course, I don't know whether it will even set seeds or not.

On the whole, this has not been one of our better lycoris years. We had a long, cold winter and the fall-foliage types all had more or less damage to their leaves. Surprisingly, the fertile radiatas, which bloom 3 to 4 weeks ahead of the common form, are showing up now in surprising numbers. They are later than usual, because some years they open by August 10, but it is a satisfaction to have so many of them. Really they seem rather more floriferous here than the common type, though I think the common ones may have slightly larger flowers.

Squamigeras bloomed pretty well and are gone now; they were not quite as plentiful as last year. Incarnatas still puzzle me. Some of the clumps gave 4 and 5 scapes, as good as you could want, and others gave none at all. Haywardi did not give me a single scape; it makes spring foliage here, but it comes up so early that it may be nipped, as it was this year by a hard freeze which apparently damaged it so that no blooms were produced. But I am glad that it apparently is turning out to be very good in the Lower South.

I got two magnificent scapes on houdysheli. Again, I think it may be the prettiest lycoris I know; certainly it is one of the best. But it's a little disappointing in giving me only two scapes. After all, I've had it 12 years and must have between 15 and 20 large bulbs now. My name-sake, L. caldwelli, scorned me by blooming not at all; it has never been free-blooming here. But the new hardy yellow, sperryi, that we found here in Nashville, gave me one scape and 3 scapes in the garden of Miss Aileen Bishop, who has the original planting. Considering that we have so few bulbs, that is not too bad. I hope to save seed from all of these.

Sprengeri has already started blooming and apparently is going to do pretty well, as buds are pushing up in several different locations where I have bulbs.

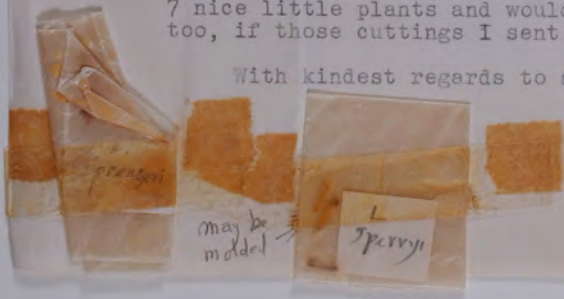
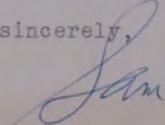
I don't know whether you have the remotest interest in trying to hybridize lycorises, but am enclosing some fresh pollen from L. sprengeri and the hardy yellow, sperryi, just in case you have something in bloom there on which you could make a cross. Remember, the anthers must be removed from the seed parent before the buds open, in order to prevent selfing.

By the way, Dr. Traub now thinks that our yellow sperryi is different from the yellow one at Glenn Dale which he named L. chinensis, and there is a good possibility that the name "L. sperryi" may be made valid.

Sometime when you write, give me the Armstrongs' address. I remember that Mrs. Armstrong was interested in my Chinese trumpet vine. My cuttings didn't produce as many plants as I had hoped, but I have 7 nice little plants and would like to send her one. And one to you, too, if those cuttings I sent failed, as they might have done.

With kindest regards to all of you at Back Acres, I am

Yours sincerely,





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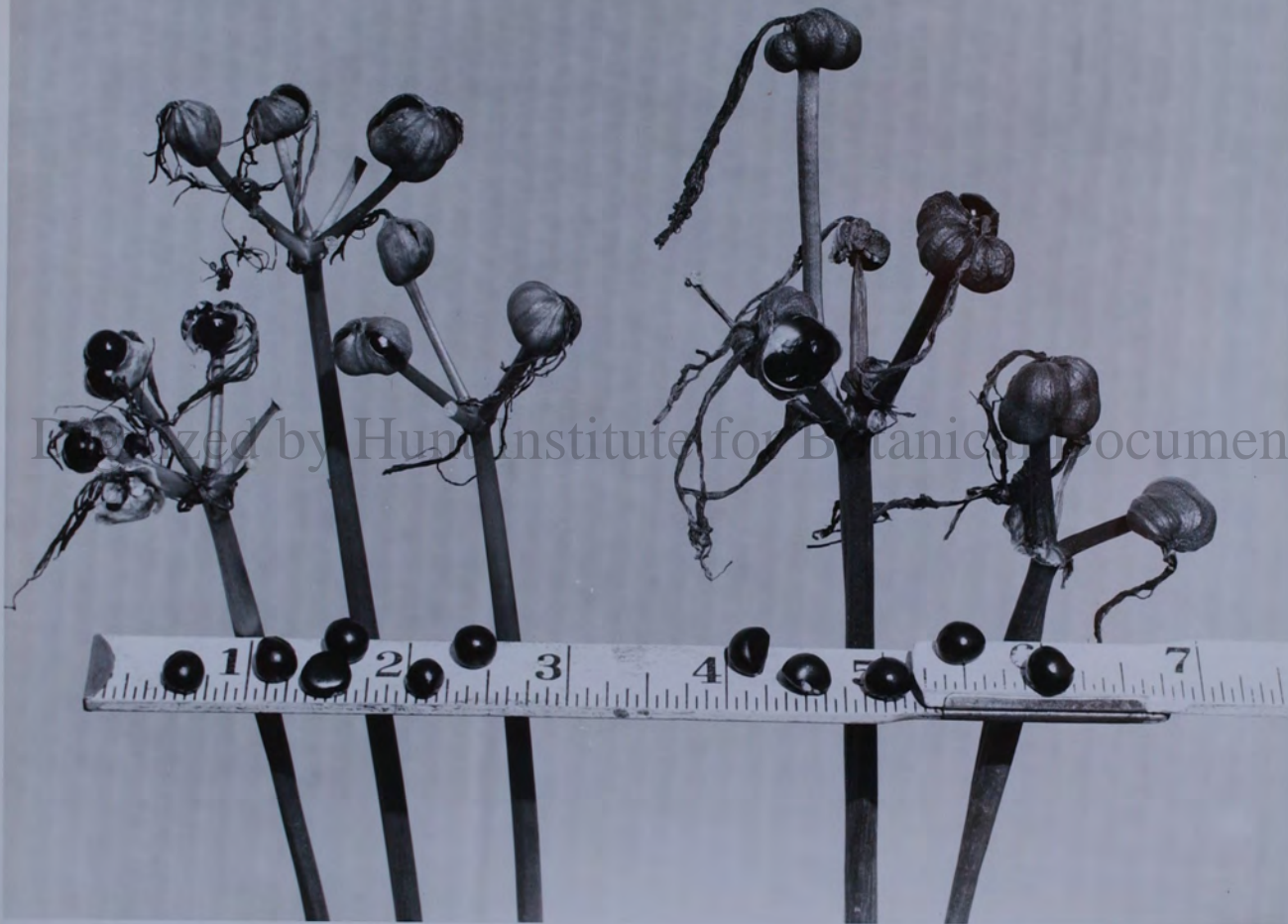




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SAM CALDWELL

ROUTE 4 • HOLT ROAD  
NASHVILLE 11, TENNESSEE

November 22, 1961

Dear Ben:

This is just a little note; I must write something because I feel so guilty for the long silence. But I'll come across with one of those lengthy epistles before long. Meanwhile, I guess you could figure when the little box of *L. radiata* bulbs got there that I am still alive.

Actually, I'm all right. And it was nice to get your letter before I went to Shreveport, suggesting that I stop again at Back Acres. Don't think I hadn't thought of it myself when I first knew of the Louisiana trip. But as it turned out, my route was through Arkansas and the corner of Texas, and I was never closer to you than Shreveport, itself, which I believe is still some 300 miles away. But it was good to know you would still have me, and I'll keep that in mind whenever I do get within visiting range.

The Shreveport trip was nice. I was able to talk all I wanted to about lycorises and to show practically all of my lycoris slides. And you should have heard them applaud the new hybrids. Now I am committed to try to find some spare bulbs of some of the rare things to send to Minnie Colquitt, Caroline Dormon, Leonora Mathews and Kitty Simpson--all fine gardeners in the Shreveport area. It won't be hard with anything except *L. houdysheli*--I do hate to part with any more of my few bulbs of it, and yet it is such a pretty thing that I want some of them down there to see it.

I was going to see Lois Flaxman while in Shreveport. Some of the audience knew her when I mentioned her during the program. But I had only one afternoon to visit and a terrific rainstorm came up. I got nowhere except to Caroline Dormon's. She had had a heart attack and was in Shreveport staying with her niece. But Caroline seemed in pretty good shape. She expects to go back to Briarwood and her plants, so we talked about lycorises, hymenocallises and everything and had a wonderful time until I had to leave. I am going to send her some bulbs as soon as she gets back to Briarwood, and she thought she could send me a lycoris or two that might be interesting. In fact, if she described them correctly, I know they will be interesting. But she is not very familiar with the different species.

The "late" *radiata* bulbs I sent you are from a batch growing at a nursery here that Geddes Douglas bought a couple of years ago. We have been watching them now for two years and think they may be an extra good strain. In 1960 they were at peak bloom on October 6 and this year their peak was around October 12. This is about three weeks or more later than the *radiatas* commonly grown around here. Further,

## SAM CALDWELL

ROUTE 4 • HOLT ROAD  
NASHVILLE 11, TENNESSEE

these have been unusually reliable bloomers, with nearly every bulb giving a scape. Actually, we've had rather rough winters here the past two years and most of our radiatas have not bloomed so well.

Anyway, the only way to find out about these things is to give them a try in different locations. That's why I sent some to you and am also planting some in different locations here, to give them a thorough comparison with the common radiatas. We don't really know where they came from in the first place. I thought they were from Japanese bulbs bought years ago by the original owner of the nursery, but Geddes thinks now that they are from bulbs that were secured years ago in Georgia. Possibly they'll check out exactly like some of the radiatas you already have.

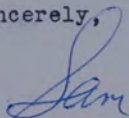
When I write at more length I'll give you a report on this year's harvest of hybrid lycoris seeds. There is not such a quantity but a most interesting variety of things. There was a near tragedy while I was in Shreveport. I had all the lycoris seeds gathered and labeled and packed in individual pots of moistened peat moss to hold them until I could plant them. The pots were all in a bushel basket under my little greenhouse bench. While I was away, something --I think it was a mouse--got in the basket and upset about half the pots. I don't think any seeds were eaten, but I'm afraid there are now some "mixtures". Anyway, I took enough notes so that I should be able to straighten things out when the seedlings bloom. Fortunately not all the pots were turned over.

Like you, I have worlds of lycoris seedlings showing top growth now. The sperryi-radiata cross seems particularly vigorous. But the straight sperryi seedlings are quite baffling. Some of them have leaves now and some do not. They do not seem to be at all consistent in the time of year that foliage is produced; that is, in the small seedling bulbs. The big ones have always been late making foliage--in March.

I have to run to town now to transcribe my radio program. Normally this is done on Thursdays, but with tomorrow being Thanksgiving, we're working a day early.

Hoping you and Andy and all the people and plants at Back Acres are well, I am

Yours sincerely,



LYCORIS BULBS: Hybrid seedlings, from Sam Caldwell, Route 4, Holt Road, Nashville 11, Tenn., to B. Y. Morrison--Sept. 6, 1961.

|  |         |
|--|---------|
| L. haywardi X L. sanguinea #100<br>Seed: 9-19-59 | 5 bulbs |
| L. radiata X L. haywardi #108<br>Seed: 10-7-59   | 1 bulb  |
| L. radiata X L. sperryi #107<br>Seed: 10-7-59    | 2 bulbs |
| L. sperryi X L. haywardi #102<br>Seed: 9-30-59   | 4 bulbs |
| L. sprengeri X L. haywardi #105<br>Seed: 10-7-59 | 3 bulbs |
| L. sprengeri X L. sperryi #106<br>Seed: 10-7-59  | 4 bulbs |

6666

---

Also included in package:

Several bulbs of Lycoris ?, from India #79 (Probably a form of L. radiata --received as a nerine in a group of bulbs from India in 1957. Has never bloomed for me.)

Sprouted rhizomes of *Smithiantha cinnabarin*

8/19/21

(6/5)

new  
yellow  
in  
1st lot  
of  
albiflora  
from  
Guille

Pale-Orange Yellow -

center + face inside Orange Buff  
outside border is Pink

Band fluster Greenish Pink

No folios in Caldwell

Between Martius Yellow & White

Keeps Martius yellow inside in center lines

Arctophel - same

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No 1 - same

Seems Rogue in Guille "albiflora" Aug 31

Ochraceous salmon, slightly washed on edges with  
Apricot Buff -

center line of each segment, yellowish Citrus

Some waxy on margins but not a real "filling":

comes as yellow!

SAM CALDWELL

ROUTE 4 • HOLT ROAD  
NASHVILLE 11, TENNESSEE

August 16, 1961

FLASH! FLASH! WHEE-EE-EE!

BULLETIN FROM LYCORIS BEDSIDE: IT'S AN OH BOY! BABY!

Dear Ben:

Today is such a fine day. Only last night I was a bit depressed, because the buds on that sprengeri-radiata hybrid (?) looked suspiciously like plain old sprengeri to me. They did seem considerably redder, but I feared this was just wishful thinking on my part. They had that deep bluish glow at the tips, so characteristic of sprengeri. I was just resigned to waking up this morning and finding a typical sprengeri bloom. Then I thought how that would make me and my writing about lycoris hybridizing look silly.

But it was a sunny morning, and fifty feet before I got to the little lycoris nursery bed I could see something different. The new baby really is a honey--at least, I think so. Maybe it's not the prettiest lycoris in existence, but it is quite beautiful and certainly it is distinctly different from anything we have now.

Actually, only one bud has opened, and there are 8 in the umbel; so I'll wait a day or two for a complete description and pictures. But at a glance it seems to have inherited form largely from sprengeri and color from radiata. Segments are not quite as wide as in sprengeri, but they are smooth and flat and flared outward. The flower is practically a self-color, rich purple red that glows. Right at the segment tips there are violet marks, undoubtedly inherited from the deep blue on sprengeri.

Changes may come as the flowers open and age, but there's no doubt about its being a hybrid. I'll get both black-and-white and color pictures and send you copies.

Of course this inspires me to keep up the lycoris hybridizing. And thanks a million for the two lots of sprengeri pollen. They have been put to use on sperry1. Now, of the other kinds you offer, I will be very happy to have some pollen from your White No. 1, just as soon as possible. I have four scapes of haywardi coming late in a shady, isolated spot. And send the caldwelli pollen, too, if there's any left. I got no results with it years ago, but after all, I might try again. Frankly, I don't think it's very pretty. But it is hardy up here and might

## SAM CALDWELL

ROUTE 4 • HOLT ROAD  
NASHVILLE 11, TENNESSEE

give some good qualities to a hybrid. The White No. 1 very definitely ought to be worth while, because it is a beautiful thing and apparently fertile, since I got one seed on it last year. Somebody down there or in Louisiana or Georgia should cross it with the fertile radiata. There should be a wonderful lot of beautiful pink things eventually resulting. How about you to give it a try? There isn't a peep out of my own radiatas yet, and some years they are in full bloom by this time. But this has been a rainy summer, which may account for the delay. I am not expecting many radiata blooms, because it was a tough winter, but certainly I'll have some radiatas. In fact, if you send me the White No. 1 pollen, I'll use it on haywardi, now ready to bloom, and save it to use on radiatas, when they come along.

I believe I'll leave the various albifloras for people in the Lower South to work with. Doubtless some of those forms are fertile--maybe the one from Houdyshel, if it's the true species--but in general they just can't seem quite to "take it" outdoors here in the winter. Of course, I am growing a number of them in my nursery frame, which is covered with a sash in the winter. Incidentally, a bulb you gave me when I was there back in May, labeled Albiflora "Deep Pink" now has a bud pushing up in the frame, so I look forward to seeing it.

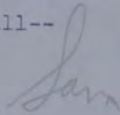
To make sense from all this rambling, this is what I'd be interested in you:

Send pollen of White No. 1; also of Caldwelli, if any is left.

Observe your caldwelli for these points--Does it ever make a presentable umbel, with at least 3 or 4 flowers in good condition at once? Mine did, one year, when I got a good picture. But usually the flowers "drag it out"--with just one or two open at a time. Does the pale yellow color fade out almost completely in one day? (I think you may find the flowers looking something like the N. C. albas, but it seems distinct to me, in making taller scapes and especially in foliage habit. It is a spring-foliage, squamigera type, while all the albas I've seen grow like radiata, with fall leaves.)

It was nice to talk to you the other night. I hope things work out fine with Andy's azalea slides.

Regards to all--



(over)

P.S. I just re-checked your letter that came with the pollen.  
Thanks for the offer of the Grille bulbs. You've been very generous  
already, and unless you feel these might differ from those he's  
previously supplied under those names, I don't believe I'll ask  
for them. They are beautiful, of course, but I have to grow  
them "under cover," and I have generous samples under the  
"albiflora" and "albiflora carnea" labels that you've already given  
me. But I would be glad to have some of your White  
No. 3. I don't know it at all.

more later, when the new 'baby' develops further.  
S

See typed letter first,

Bulletin No. 2 — August 17, '61

Dear Ben:

I didn't get the other letter mailed yesterday, so will add a note today, as I am in, as usual, to transcribe my notes program.

The new lycoris baby looks marvelous today, with 6 buds open. I wish you could see it. Will make color slides and send you one.

And to make this a really unusual lycoris year, I just noticed 8 buds starting up in one of my calabelli clumps. I've never had more than 2 in any previous year and can ~~remember~~ <sup>remember</sup> it a poor bloomer. But it did make very lush foliage growth this past spring and I went out each night when a freeze was predicted and covered the leaves with a plastic sheet. Maybe it is trying to thank me for the attention.

I picked up your Aug 14 card in my mail box on the way to town and have just read it. Glad to know you think my lycoris nomenclature is all right. Maybe I will revise my opinion.

And I remember that White No 1 is not white at first. In fact, mine was very difficult to describe — pale pastel tints perhaps verging toward a yellowish glow — or  
(over)



at any rate a sort of cream yellow but with  
a faint pinkish suggestion. I thought it was  
perfect. Later it did fade out to near white  
though not a real snowy color.

Isn't all of this fun? It's certainly  
my best ever Lycoris season.

And now I'm wondering. Will all my  
sprengeri - radiata and radiata - sprengeri seedling  
buds be like the first one that has bloomed? Or  
is there normally variation in a first cross  
between two distinct species? I must have seen  
hundreds of various ages in these crosses

Enough for now -

Sam

Subject .....

From .....

To .....

Date .....

SAM CALDWELL

ROUTE 4 • HOLT ROAD  
NASHVILLE 11, TENNESSEE

July 27, 1961

Dear Ben:

Your letters and cards have been wonderfully cheering. At least they seemed to indicate that you have not marked me off as the All-America ingrate. I do not know how I manage to be so inconsiderate of nice people who do things for me--yet here I have delayed more than two months in saying a warm "Thanks" to you and Andy for the really wonderful day I had at Back Acres on my Louisiana trip. Honestly, I shall try to reform. For one thing, I'll get some Postal Cards and write short notes occasionally. The trouble is that when I think of writing someone like you, I want to write practically a book. And as I seem to remain perpetually tired, I just barely manage to get through the things that have to be done here, and never feel quite like getting the book started. But enough of that. The entire Louisiana trip was most enjoyable, and the Mississippi extension of it was a real high point. I liked everything from the walks and talks with you and Andy, and seeing all the plants, to the flounder, which was grand.

And Oh, the loot I brought home. You should see how the little Pterostyrax trees are growing. I still have them in pots but think I'll shift one to the ground right away, as they have grown taller and "fattened" their little trunks too. The lycoris bulbs went at once into my special "nursery" bed. We have had a wonderfully wet summer and I am sure they are well rooted down in the soil. I have an idea that some of them will bloom this season; they were certainly large enough--at least, most of them. And camellia cuttings and seedlings, as well as a pretty selaginella given me by Andy are doing well.

Now I must get down to the lycorises--or maybe "up" to them, as they always give me a great lift. I am so glad that you had a bloom on Houdysheli. I do agree that it looks quite like your "White No. 1"; in fact, I think I wrote you or somebody last year, right after No. 1 had bloomed, that it certainly suggested L. houdysheli. But it doesn't seem to me to be much like No. 2, which is smaller, with narrower segments, and of course, pinkish. Considering its distinctive foliage, however, and its hardiness, I suppose that houdysheli might really be different. It is quite satisfactory outside here, or at least as satisfactory as radiata. A rough winter will damage them both. I am expecting only fair bloom on them this year, as we had a lot of 4 and 5 degree nights last winter and one at 1 below zero. Foliage on all the fall growers was somewhat damaged, which usually means not too many flowers the next season. But on the other hand, the L. elsiae type (and I had at first assumed that the White No. 1 and No. 2 must be close to this) is much more tender in the foliage to frost. It is so badly hurt when grown out of doors without protection here that there are few or no blooms. So I have now moved all my bulbs into the protected growing frame. I have not risked the No. 1 and No. 2 whites outside here as yet; in fact, they are grown in deep boxes in my little greenhouse. It's quite possible they'll take outdoor conditions--I'll try them eventually.

Now about the lycoris article--Yes, I'll do it all right, since the revised request isn't quite so frightening. As long as I am two or three years late with it already, suppose we delay it about two more months, which will enable me to put in this season's experiences. As a matter of fact, I have already had one exciting episode. The lycoris season really opened with a bang for me, because the first thing to bloom was *L. chinensis*, the Glenn Dale (P. I. 162443) yellow. Mr. Lee sent me the bulb in March, 1958, and this was its first flower. It was at peak on July 17 and 18; I spent two entire mornings and about \$10 worth of film trying to record it properly--everything from 35mm slides up to 4 X 5 Ektachromes and some black-and-whites, of course. It is a beautiful lycoris. It made a sturdy 14" scape with 6 large flowers having a spread of  $3\frac{1}{2}$  to 4" each, and the umbel measured  $9\frac{3}{4}$ " across, to the outer tips of extended pistils and stamens. On first opening the color is what I would call a rich clear yellow, but it soon deepens to orange--or "strong orange yellow 7.5 YR 7/11" of the Nickerson Color Fan. Apparently this is about the normal height and season for it, judging from what I have read.

Very frankly, I don't think I would be able to distinguish the *L. chinensis* flower from what we are calling *L. sperryi*. But *sperryi* comes later (my first bud has just pushed out of the ground) and has scapes up to 30 and 31 inches high. And the foliage of the two doesn't seem quite the same. Dr. Traub thinks they are different, but I think further checking needs to be done.

Nothing else was blooming for me when *chinensis* flowered so I carefully selfed it, and apparently am getting a good set of seed. If I just live to be about 100, maybe sometime I'll have a long border of it. I think the one bulb Mr. Lee sent me has now multiplied to two, but that is not much increase in three full years. So the seed may help.

*Squamigeras* are just coming in here in quantity and *sanguineas* have popped up in two locations. And that's all to date, but you can be sure I make the rounds every morning to see if a new spear has pierced the surface and started up out of the ground. It has been a wonderful summer insofar as rains are concerned. I have never seen it so green here this late in July. It has been raining just about every week. Checking with past bloom dates, I find that what I have now falls within what I would call normal season for the few species. It's right on the nose for *squamigera*; maybe a little late for *sanguinea* and probably will be a few days early for *sperryi*, which has been coming about mid-August. The bud now showing should come into bloom in 10 or 12 days.

I am looking for all of the spring foliage species to do pretty well this year. We had a relatively cool spring but there were no sudden, damaging freezes and the spring foliage grew and ripened very well. However, the fall-foliage kinds took pretty much of a beating from the weather, and a lot of leaves were yellowed and browned prematurely. I am looking forward with interest to seeing how well they bloom. I guess your flowers down there would naturally come somewhat ahead of mine, and yet I don't understand why *houdysheli* should have come so early. For me it is usually in late August. We certainly have a lot to learn about these bulbs.

While we are having lots of rain, the weather is so terribly hot and humid that I am not able to do as much work as I'd like outside. I am trying to get a new and larger lycoris "nursery" bed made. In fact, I want to make several concrete bordered growing beds for my choicer daffodils, some lilies and a few other things. Lycoris foliage does not usually start on any species here until September, so if I can get the bed finished by then I am going to turn all my hybrid seedlings out of the pots they are presently in and set them in the bed. At that time, if it is still OK with you, I want to send some of each cross down for you to grow. I think you'll beat me to bloom by two or three years--maybe more. I just have never seen anything like the way the bulbs build up in size for you. Most of the bulbs I have in mind sending are just two years old now, so are still quite small.

Please be sure to check and see if the bulb of *L. haywardi* I sent you two years ago blooms this year. If it does, this would make three consecutive years of bloom from the one bulb, and we need to know if this sort of thing happens with many species. Under conditions prevailing here, there seems to be some evidence that bulbs of some species, at least, may bloom only in alternate years.

Well, that's all for this time. But please don't ever get completely disgusted and give up on me.

Just one thing more occurs to me. For the AMC lycoris article we should have good pictures of everything possible. I will have nearly everything, but I do not have a picture of *L. traubi*. Oddly enough, I have had only a few blooms on it. For some strange reason it has never done as well in pots for me as the regular *St. Augustine aurea* (which is fairly reliable in large pots and wooden boxes). And then *traubi* just isn't hardy enough for outdoor culture here. So as a result, I haven't had any real good blooms to photograph. Surely you will have some. Maybe Andy will make some good close-ups, so we would have one to use with the story.

Warmest thanks again to both of you and best regards--

*Sam*

LYCORIS "SPERRYI"--ADDITIONAL NOTES: In a very good lycoris season here in Nashville my greatest thrill came when I saw for the first time blooms on this new lycoris. It reached peak bloom around mid-August in two local gardens where there are four clumps which have been established, apparently, for many years. It is a large lycoris with strong scapes 23 to 30 inches tall. Of some ten scapes observed, each one had six flowers to the umbel. In form there is a general resemblance to flowers of the *L. radiata* type; that is, the segments are long, recurved and fluted or ruffled along the edges. Color is a rich orange yellow. Umbels measure  $7\frac{1}{2}$ " to 8" across and individual flowers,  $3\frac{1}{2}$ " to 4". Segments are relatively wide; when flattened out they measure  $3/8$ " to  $1/2$ " in width.

This is a wonderfully beautiful lycoris and because of its hardiness should prove very valuable when bulbs are available. It makes foliage growth in the late winter and early spring--in the manner of *L. squamigera*, rather than in fall, as *L. aurea* does.

One question to answer is whether this is the same as the Lycoris #162443 growing at the USDA Plant Introduction Garden in Glenn Dale, Md. I have never seen that one in bloom, but Mr. Frederic P. Lee was kind enough to send me a bulb of it last winter, and I was able to compare its foliage growth with that of *L. "sperryi."* While leaves on both appeared at about the same time, very early in the spring, there was a marked difference between them. Those on *L. "sperryi"* were of a much bluer green color than those on *L. #162443.* There is a chance that this may have been due to the bulbs' being of different age and size. However, I gather from the description of *L. #162443* published in the National Horticultural Magazine that it is a smaller growing lycoris than *L. "sperryi."*

Meanwhile, I will use every means to see that this local lycoris is increased as much as possible. Apparently it is very slow to multiply by natural bulb offsets, but it is high in fertility to its own pollen and every one of the large black seeds seems to germinate. The few little bulblets I've been able to distribute this season all came from 1957 seeds that were given to me. May I suggest that they be handled carefully--grown in pots in a greenhouse or coldframe in winter for a year or two. Mature bulbs are quite hardy here in Nashville, where winters are about as cold as they are in Philadelphia and New York. But foliage on the seedlings--as on other lycoris seedlings--is a little erratic and may show up at almost any time. It would probably be damaged by severe cold.

Incidentally, I have had two scapes of *L. "sperryi"* pressed by Dr. Elsie Quarterman, botanist here at Vanderbilt University, and they will be sent to Dr. Traub. I also got good photographs of the flowering clumps and tried pollen from *L. "sperryi"* in a cross-breeding experiment with *L. haywardi*, which happened to be in bloom at the same time. Seed seem to be developing successfully.

LYCORIS CALDWELLII--From China. Leaves similar to those of *L. squamigera* but narrower, appear in February in Tennessee and persist until late spring. Scapes appear late August to early September, about 21" tall with 5 flowers, usually. Flowers are first pale yellow and age to ivory or cream white. Hardy outdoors at Nashville, Tenn. Named, fully described and pictured in HERBERTIA 1957, issued by the American Plant Life Society.

LYCORIS HAYWARDII--From Japan. Leaves start in late January or early February in Tennessee and die down in late spring. Blooms come July to mid-August, scapes about 18" tall with 4 or 5 orchid-pink flowers, deep blue at tips of segments. Hardy outdoors at Nashville, Tenn. ~~Mark~~ In general appearance about halfway between *L. squamigera* and *L. sprengeri*; much like the latter in coloring but a little paler. About half the size and height of *L. squamigera*. Named, fully described and pictured in HERBERTIA 1957, issued by the American Plant Life Soc.

LYCORIS RADIATA--The form supplied is NOT the common *L. radiata* grown by the thousands in the South and Southwest but a much more rare fertile form which blooms 3 weeks to a month earlier than the common one. This fertile form was for a time thought to be in cultivation only in Japan but it is now known to be in gardens in a few places in the South. My stock came from an amateur gardener in Elberton, Georgia. It usually blooms around August 10 to 20, whereas the common form ordinarily opens around September 15. Foliage comes as soon as the flowers fade, on both forms, and persists through winter in green condition. This form is self fertile, making large, round, shiny black seeds, which should be planted as soon as they are mature. The common form does not seed.

LYCORIS "SPERRYI"--This is a tentative name, used merely for convenience, of a hardy golden-flowered lycoris brought to Nashville, Tennessee by Mrs. Henry Sperry in 1925. She got the bulbs in Hukow, China while visiting her daughter, a Methodist missionary stationed there. To the best of my knowledge they are unknown elsewhere in this country. They may turn out to be the same as the hardy yellow lycoris now growing at the USDA Plant Introduction Garden in Glenn Dale, Maryland. That one (#162443) was received from China as *L. "aurea,"* but is not like the tender *L. aurea* of St. Augustine, Fla. I believe Dr. Traub is naming the Glenn Dale lycoris *L. chinensis*. The *L. "sperryi"* is hardy here in Tennessee and has grown for some 33 years in a few gardens here without the owners knowing what it was or how rare it is. It was brought to my attention in the fall of 1957. Bulbs are still extremely rare and hard to find here. I am attempting to have it identified or named, if it turns out to be new to cultivation. I understand that an account of it will appear in HERBERTIA 1958.

SAM CALDWELL

ROUTE 4 • HOLT ROAD  
NASHVILLE 11, TENNESSEE

January 23, 1958

Mr. B. Y. Morrison  
Pass Christian Nurseries  
P. O. Box 21  
Pass Christian, Mississippi

Dear Mr. Morrison:

Don't ever be disturbed when weeks--or months--elapse before I answer letters. It doesn't mean a thing, except that you are one of the people to whom I want to write a LONG letter, and I get involved in so many other things that I never seem to get started on a long letter. It's a wonder I have any friends left. Fortunately, most of them are very understanding.

I like everything in the plant line, but am very, very much interested in the lycoris, possibly because there seems to be a relatively unexplored field here. For instance, it seems incredible to me that I should be making some of the first crosses that have been made between different species of the genus, and yet, it may be true. I'm not sure yet. But at any rate, we need more "off season" bulbous plant material to supply blooms when not too many other things are flowering, and the various lycoris should help supply it.

Now for some of the matters in your letter: I, too, have problems with Dr. Traub. I've never met him, but he apparently is a "character." Sometimes I doubt the basic sanity of anyone who could dream up such horrible terms as "petepalseg," "setepalseg," "tepalseg," and the like. I have refused, absolutely, to learn what they mean, and so I sometimes have difficulty in understanding what he is writing about. As a great believer in simplicity and clarity, I have occasionally made suggestions to him on some problems of nomenclature. He evidently regards me as a wayward child when it comes to the subject of botany, and he writes me kindly letters explaining why the names I suggest couldn't possibly be used. He is completely correct about my ignorance of botany; I have never studied it. But as a practical gardener with many different plants and a fair supply of reference books about them, I see a need for some sort of stability in botanical names, so that labels, catalogs and books are not thrown out of date by the constant name-juggling acts that the botanists seem so delighted in performing.

However, Dr. Traub apparently has good standing as an authority on amaryllids. He has really been very cooperative in identifying scapes which I have air-mailed to him; and, in turn, he seems appreciative for my supplying pressed herbarium specimens as type material for a number of different lycoris. I simply grow the lycoris and take cut scapes to Dr. Elsie Quarterman, botanist here at Vanderbilt. She presses them and forwards them to Dr. Traub.

Here are some assorted notes that may be helpful:

*Lycoris aurea*, as generally accepted at the moment, is the quite tender yellow-flowered lycoris grown considerably outdoors in northern Florida, particularly around St. Augustine. I grow it here in pots. Its leaves come in fall, immediately following the scapes. The leaves are glaucous and quite tall--some on my potted bulbs are now 27 inches tall when stretched out for measuring. This lycoris has been cultivated around St. Augustine for many, many years, and for a long time was what all the dealers supplied when you ordered *L. aurea*.

Some years back--perhaps 12; I'm not sure exactly when--wholesalers who ordered *L. aurea* bulbs out of Japan began getting very good bulbs, as cheap as \$6 or \$8 per 100, that bloomed much like the St. Augustine aureas but made shorter, glossier, deeper green leaves--still producing leaves in fall, after the scapes. Also, flowers on the scapes tend to face out more, horizontally, rather than tilt upward, as in the St. Augustine type, and the flower segments on the Japanese bulbs are a bit wider. Altogether it is probably a better lycoris than the St. Augustine aureas, especially as it has proved hardier to cold. I know of some doing well outdoors in a very protected spot at Memphis, but I fear they are not going to survive our somewhat colder Nashville winters. This is the lycoris that Dr. Traub has named *L. traubi*. I presume there must be enough difference between it and the old Florida type to justify the new name. But there certainly will be confusion for years, because practically all of the "*L. aureas*" currently being listed and sold by dealers are imported Japanese bulbs, and are really *L. traubi*.

For a year or two Dr. Traub kept insisting in letters to me that the yellow-flowered lycoris at Glenn Dale (#162443) was really the one he named *L. traubi*. But I had talked to John Creech about it and felt sure that from its hardiness and habit of making leaf growth in spring rather than fall, it must be different. Now Dr. Traub agrees it is different; in fact, I think he is planning to christen it a new species (*L. chinensis*) in the 1958 *Herbertia*. Quite likely it will be the same as the hardy golden-flowered one I found here in Nashville.

To make matters more confusing, Miss Willie May Kell, a lycoris enthusiast in Wichita Falls, Texas, has written me that she got some additional variations in "aureas" received from a Dallas seed house last summer.

Of course *L. caldwelli*, one of the new ones, is very pale yellow, but it is quite hardy even here, makes foliage in spring, and isn't much like aurea at all.

I, too, have the fertile *L. radiata* in fair quantity, and the common sterile forms from various sources. The fertile one usually starts blooming for me around August 10 to 12, and the others from three weeks to a month later. And I also have minor variations among the sterile ones. Some have very long, slender leaves with sharply defined light center strip; others have leaves a little broader and wider, with light centers. There is as much as two weeks difference in blooming times among various



groups of them. This may be inherent or it may be due to the different soils and situations in which I have them planted. I have never been absolutely sure--because their blooming seasons do not quite overlap--but it seems to me that blooms on the fertile ones are a little "redder" and very slightly smaller than on the sterile forms. Also, I think the fertile type may be hardier and somewhat more reliably floriferous under our local conditions. Incidentally, I got my fertile *L. radiata* from Miss Lizzie Wright, Elberton, Georgia (just from an adv. in the Ga. Farmer's Market Bulletin). Evidently she still sells them, for I have given her as a source of supply to several people who tell me that they got bulbs from her.

A most confusing situation prevails with regard to lycoris bulbs now commercially available as "white." You can buy them under all sorts of names--*L. alba*, *L. albiflora*, *L. radiata alba*, *L. radiata carnea*, etc.--and nearly all of them will come with quite beautiful flowers, a little larger than *L. radiata*, and not white but faintly tinted with pale pink and yellow blended. Your note at the bottom of page 120 of the April 1956 Nat'l Hort. Mag. refers to 11 out of 12 that you got as *L. radiata alba*, and I am sure they are of the type I am referring to. I thought for some years that they really were *L. albiflora*--or possibly *L. straminea*--but Dr. Traub somehow dug up original descriptions of those two species, and neither fits our current "white" ones with the pale tints. So my understanding is that Dr. Traub is going to name this pale one in the 1958 *Herbertia*. I supplied type scapes last summer. He is naming it for the botanist here at Vanderbilt who has been pressing specimens for several years for him. I am enclosing a story I did for him on this one, and it fills in more details. (You will note corrections in my typed manuscript. That is because Dr. Traub changed his mind about the name--originally he was going to call this one *L. houdysheli*, but he gave that name to a larger, hardier and better lycoris.)

Mr. Rex Pearce once wrote me that in any big lot of these "white" lycoris bulbs there would be variants, and apparently you got one in the self-colored pale yellow mentioned in your Nat'l Hort. note. You'd better keep quiet about it, or Dr. Traub will think up a new name for it.

*L. houdysheli* is quite distinct and different from the "white" lycoris just mentioned. It is a real gem, to my way of thinking--hardy here, large and beautiful. It opens quite dazzling snow white in full sun, or milk-white in shade, and has no color until the blooms are several days old, when they begin to acquire pinkish flushes. (This is just opposite from the "whites" mentioned above, which open with their strongest tints and fade lighter with age.)

*L. haywardi* is best described as a half-size *L. squamigera* which will probably bloom well in the Deep South and Florida, as well as up here. It is much like *L. sprengeri*, but a little earlier and a little lighter colored. Hayward says it blooms well in central Florida when he keeps his bulbs weeded and cared

for--as he seldom does--and it certainly is a good bloomer here.

Unless you got bulbs from Hayward direct, sometime from 1948 on, it is unlikely that you have any of the three--houdysheli, haywardi and caldwelli. They all came from a common source in Shanghai, and I don't think anything quite like them has showed up in other imports. I certainly wish we could get more--I'd like to have hundreds of houdysheli. Hayward seems to prefer haywardi, but since I have both sprengeri and squamigera, it is not such a novelty to me. My own namesake is all right, but not exactly sensational.

To help clarify some of the above, I'm sending also several Kodachrome slides. Slides are numbered in upper right hand corners, and the following notes apply:

No. 1--Made in direct sun, this slide is poor in color--much too light--but gives an idea of the size and form of L. haywardi (at bottom) as compared with the taller L. squamigera, which you undoubtedly know. The squamigera scape was cut full length and stuck among the 18" haywardi scapes for the picture. Haywardi is not really dwarf, as it is made to look here. It's a quite respectable size, but squamigera simply gets ~~up to~~ up to 26" and more in height here. Also the slide shows practically none of the attractive blue tint at the ends of the haywardi petals.

No. 2--L. houdysheli as it grows in a sunny spot for me and No. 3 shows ~~two~~ cut blooms from bulbs growing in partial shade. Note the wide segments and note that they are a sort of milky white. The lower bloom is three days old and just beginning to develop the pinkish coloring that comes with age.

No. 4--The red is the fertile L. radiata and the "white" is what I got as L. albiflora, L. alba, etc. This picture was made to show that it is larger than L. radiata--one of the things, according to Dr. Traub, that prove it is not true L. albiflora. This is the one he is calling L. elsiae. No. 5 is a close-up of it alone. Actually there is a little more color than you see in the slide. It is very hard to get the pale tints in color film. You will probably recognize this as being like most of your radiata albas.

No. 6--L. sprengeri, which blooms dependably and freely for me. Note more curved and reflexed petal tips than in L. haywardi and deeper coloring. Actually, this slide is too light on the sprengeri coloring, which is quite rich and deep, with very blue petal tips.

No. 7--There is some confusion about L. incarnata. This has been verified as true. I thought you might like to see it.

There is no rush whatever, but at your convenience, please return the slides. I use them in correspondence like this with other lycoris fanciers.

Mr. Morrison--5

This is getting ridiculous--a book-length letter. I'll positively stop on this page.

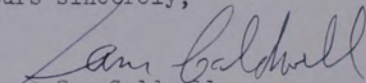
Actually, all I want to add is to say that when spring comes and the lycoris foliage all dies down--a much better time for moving the bulbs--I'll send you samples of everything I can spare--even some of my 3-year-old radiata X sprengeri hybrid bulbs. They'll probably bloom for you before they do for me, with your milder growing conditions. However, life is too short for any of us to be selfish with these things. The progress with lycoris is woefully slow at best, and there are so many things we need to learn that the more people who are observing, the better.

It is a great pity that our invariably hot, dry summers, alkaline water and mostly alkaline soils here in the Nashville area make azaleas fairly difficult. A few gardens have them. In sheltered north-eastern exposures, with well prepared soil beds, mulch and summer watering, there are some old and fine examples of the common Hinodegiri and Hinomayo varieties, plus a few others. I don't know of anyone who is really testing your Glenn Dales here--or any others for that matter. But in Memphis it is a different story. Some expensive tests of your varieties are being run. I saw beauties last April when the Iris society convention was held over there. A rather large market for Glenn Dales should develop in the Memphis area.

I believe Margaret Sturtevant is down that way. Tell her I said "Hello." She's missing some pretty cold weather, but to date there has not been much snow and icy roads.

Thank you very much for sending me data on the yellow lycoris at Glenn Dale. I have an idea it will prove to be the same as the hardy yellow one I found here in Nashville. Time will tell.

Yours sincerely,

  
Sam Caldwell

Route 1 Box 24,  
Pass Christian, Miss.,  
21 January 1958

Dr. Hamilton P. Traud, Editor,  
The American Plant Life Society,  
5804 Camino de la Costa,  
La Jolla, California.

Dear Dr. Traud:

Thank you for your letter of January 14th and I am glad to know that all have reported to you and that the correct report will be made on the future lycoris x washingtonia.

The cross that I have here, one seedling only is not the reciprocal of the Glenn Dale cross, as I do not have L. chinensis here.

This seedling of which you shall certainly have an offset as soon as there is one, is L. Traubi x radiata. This is the same cross as that made by Mr. Wood?

I wish very much that I were a better gardener if that could mean the hastening of blooming dates. I do not have other lycoris seedlings except open set seed from the fertile radiata.

It is splendid that you have the herbarium problem licked in regard to lycoris and I do appreciate what a problem that must have been. I have a couple other lycoris here, all unflowered as yet, that may or may not be distinct horticulturally if not taxonomically. If and when they flower, I shall beg the privilege of sending you material. It has been my practice to buy sample lots of lycoris from almost any offering in the South, and you may guess what curious things sometimes turn up from the people who offer their plants through the several Plant Bulletins, put out by the different States. There are many difficulties other than the fact that the bulbs are rarely graded to blooming size, chiefly that the parties offering do not know where the material came from before they had it! I ordered both "white" and "yellow" lycoris this last year from such an advertisement in the Mississippi sheet, and when the bulbs came the long necked, shoulderless bulbs were marked white and the little round bulbs with slender necks, yellow. May be, may be, but the old lady who sold them wrote that she got the yellow from one one else.... and so it goes. Leaves from the "white" one look like the leaves on L. aurea.

We are all looking forward to the publication of your The Amaryllis Manual. Possibly Macmillan will have it out in time for the International Flower Show, a date when many books get sold over their counter in the Show. This is supposed to start a book off with a "bang".

Every good wish, to you and your work,

Sincerely yours,

B. Y. Morrison

# THE AMERICAN PLANT LIFE SOCIETY

OFFICE OF THE  
EDITOR

5804 Camino de la Costa  
La Jolla, California

January 14, 1958

Mr. B. Y. Morrison,  
Route 1, Box 24,  
Pass Christian, Miss.

Dear Mr. Morrison,-

Thanks for your kind letter of January 4 which was duly received. I am writing at the first opportunity.

I have a note from Mr. Caldwell about the correction, and I will double check on the basis of your report so that it will surely come out right.

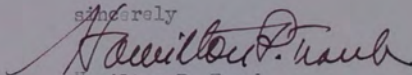
We appreciate your compliments on the 1957 issue. It has been a difficult task to place the nomenclature of Lycoris on a sound basis. We now have herbarium specimens of most of the described species and these will be available to all future workers. Thus the most difficult task is back of us. There is still work to be done however.

When Mr. Hayward kindly named the species for me, it was believed that the Glenn Dale plant (P. I. 162443) from Nanking, China, was referable to it. Dr. Crech sent me two bulbs of this plant, and one bloomed in 1957. On the basis of this study, it was shown that it is distinct and has to be recognized as a species, Lycoris chinensis (to be published in 1958 Herbertia). The unnamed species that Mr. Caldwell illustrated in 1957 Herbertia, will be published as Lycoris elsiae.  
seedlings

Dr. Crech also sent me offsets from nine different hybrids, L. radiata x L. chinensis. These are now in leaf and I am hoping to get flowers in 1958. It will be named Lycoris x washingtonia in honor of the USDA workers that produced it and the greater (metropolitan) Washington area where it originated. The reciprocal cross, L. chinensis x L. radiata that you have will bear the same name. It will be interesting to see how it differs from the other. If you can ever spare an offset, I would be pleased to grow it for a comparative study. A pressed specimen in 1958 would also be valuable as a permanent record.

Thanking you for your valued cooperation, I remain, with all best wishes,

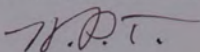
Sincerely



Hamilton P. Traub  
Editor

It should also be reported that the book, "The Amaryllis Manual" will be published by Macmillan in the spring (1958). They announced it for publication in June 1957 and then upset everything by changing printers. The galley proofs have been corrected and only the page proofs have to be gone over. I believe that their new printers are better than the old ones. Some of the last garden books were somewhat dull in appearance, and I am hoping that my guess is correct and that the new books will be better planned.

I am now busy preparing the manuscript of the entire Amaryllidaceae which I have to get out of my system. After that it will be easier since the books will not have the urgency after that.



LYCORIS - Notes from *Herbertia*, 1957 - all copyrighted.

Bose, S. The Somatic Chromosomes of *Lycoris* Caldwelli, L. Haywardi and L. Houdyshelli. Pages 33-40.

Chromosome numbers: Karyotypes,  
Caldwelli 2n - 27  
Haywardi 2n - 22  
Houdyshelli 2n - 30

Various peculiarities are discussed, satellites, etc.

*Lycoris Traubi*, Hayward.

This is the "aurea" with plain green leaves, said to appear about a month later than those of "aurea" with glaucous midstripe. To this is referred the hardy aurea of Maryland, which it cannot be (fide Creech) as this produces no leaves in autumn.

*Lycoris Haywardi*, Traub.

This is essentially, from the garden standpoint a small squamigera with only minor differences. Self-fertile fide Caldwell.

*Lycoris Houdyshelli*, Traub.

This appears to be what I have had under white radiata, and alba.

*Lycoris Caldwelli*, Traub.

This may be the pinkish form that has appeared in bulbs bought here as radiata alba and as alba.

*Lycoris* sp. Caldwell thinks he has an additional species, like radiata but blooming for him about Sept. 1 (Nashville).

Good papers on *Zephyranthes*, etc. Mostly new species from Mexico and Texas. Some new *Habranthus* described from Mexico and Bolivia.



THIS SIDE OF CARD IS FOR ADDRESS

Mr. B. Y. Morrison

Rt. 1 Box 24

Fass Christian

Miss.

Digitized by Hunt Institute for Botanical Documentation

12-27-57

162443, *Lycoris aurea* (L'Her.) Herbert  
From China. Bulbs presented by the Botanic Garden,  
Sun Yat Sen's Memorial Park Commission, Nanking.  
Received Feb. 17, 1948

25 bulbs, all sent to Glenn Dale  
Feb. 25, 1948.

---

Later :- Glenn Dale has some on hand, and  
Eugene Griffith already has made an order for material  
to go to you in June! (I didn't ask him to!) -  
a very prosperous new year!

12-30-57

PR



Description of PEI 162443 - Sent Jan 2, 58

Route 1 Box 24,  
Pass Christian, Miss.,  
21 December 1957

Mr. Sam Caldwell,  
Route 4 - Holt Road,  
Nashville 11, Tenn.

Dear Mr. Caldwell:

Three cheers for Aunt Lizzie! If I have her to thank for your fine letter with inclosures. Certainly I enjoyed her visit here last Easter time, when she bore with our poor entertainment, most gallantly.

Thank you for your letter and the privilege of reading the papers. There is one error that I hope you may correct. Not I, but Dr. Creech made the cross between radiata and aurea, about which you wrote. I may have impelled the action and the seed bearing radiata was in my garden, but Creech made the pollination, and grew the resulting seeds after I harvested them and delivered them to him. I'd love to have the credit, but it is not mine.

I do not have the data here on the P.I. 162443 but can and will get it for you and send it along. It may take a little time as even government offices are somewhat upset by Christmas times.

No, Sprengeri is not a good bloomer here, nor is squamigera. The former multiplies very well but I think it has bloomed only once. The bulbs came from the Barnes, which means you? or Van Tubergen?

Squamigera multiplies here all right but hardly gives more than one stalk from up to fifty bulbs. We have just reset it with a liberal application of bonemeal. All the best squamigeras that I have known have been in limestone country, which this is not!

Now more confessions. I am so far behind in all this that I do not even know about: traubi, houdysheli, caldwelli, haywardi! In the past I have not had happy relations with either Hayward or Traub, not altogether my fault I'd like to believe, but ----

The "aurea" that I have fall into two groups, one with broad dark green leaves, that have no suggestion of lighter tone in the center; the other (from Jacksonville and from Reuter in N.O.) have broader thinner leaves, with a wide central band of almost grayish green. These last are much more tender to cold and suffered here with our recent 20 F. The others not. I have no idea where Reuter buys his bulbs, as he is a dealer only. My other aureas have come from various places, one here two there a dozen somewhere else, the best bulbs have come from Orangeburg S.C. Middlepen Plantation and seed. So does the one bulb from Steckler, another New Orleans, dealer. This year I have plants from one of the "farm women" who advertise in the Miss. State Farm Bulletin; with leaves that approximate the first group above, but are very tender. It does not "look quite right" even before the frost touched it. My one, new kind this year is from a friend by correspondence in Oakland Calif. who had it from a man in Ireland, supposedly yellow with a copper stripe, and it is reported not to have flourished in Oakland. The bulbs looked starved to me (forgive it please) and of course may not bloom in 1958.

Certainly you shall have anything I have if there are more than one. And if you have bulbs for sale of those I do not know, or can tell me where to get them, I'd be still more in your debt.

My other interests are in *Habranthus* and *Zephyranthes*. This year I have a fair batch of seedlings of which I hope may be a true cross between *Habranthus robustus* and *brachyandrus*. The first is a veritable weed here. The other is still too new here to show its cloven hoof if it has one. The other cross which I also hope is a true one, is *H. robustus* x *Zephyranthes grandiflora*.

Of course I am so overrun with all the azalea business that has to take good first place, that I am not a proper workman to the other things that interest me even more than what has now become almost routine. But slowly I am finding out, by trial and error which *Zephyranthes* will take our situation and, apparently why. It seems to hinge on the amount of winter injury to the foliage. Some are apparently deciduous, and safe; some are evergreen and took no harm at 27 but died off at 20; some were ruined at 27. This year.

Most certainly I agree with you that *Lycoris* are wonderful plants and that there should be more of us concerned with them. They are most neglected here on the Coast. And now, if your new *Sperryi* will only multiply and get into general cultivation, how wonderful to have a safe yellow!

I'll hasten an inquiry to my one dependable source of data from my one time office and will let you know as soon as I can.

All the best wishes in the world and to Mrs. Washington when you see her.

TOKYO KYOIKU UNIVERSITY  
(TOKYO UNIVERSITY OF EDUCATION)  
FACULTY OF SCIENCE  
OTSUKA, TOKYO

BOTANICAL INSTITUTE

August 28, 1963

Mr. B. Y. Morrison  
Route 1 Box 24.  
Pass Christian,  
Mississippi, U. S. A.

Dear Mr. Morrison

Your letter of August 15th was duly received and I am writing at first opportunity.

The matter mentioned in your letter fails to come up to your expectation. Because I lost the all bulbs of Lycoris straminea, when Tokyo was struck by the KANOGAWA typhoon in 1958. Therefore, I am sorry to decline, but I can't send the bulb to you.

But the bulb of Lycoris straminea is very important for my study, so that I am seeking for the bulb in whole Japan, however I didn't discover it yet. If I find it, I will send it to you surely.

In place of it, with this I inclose a color slide and a pressed flower, I do hope that you will gain a better understanding of Lycoris straminea.

Very sincerely yours

*E. Takemura*

E. Takemura