Au April 18 1880

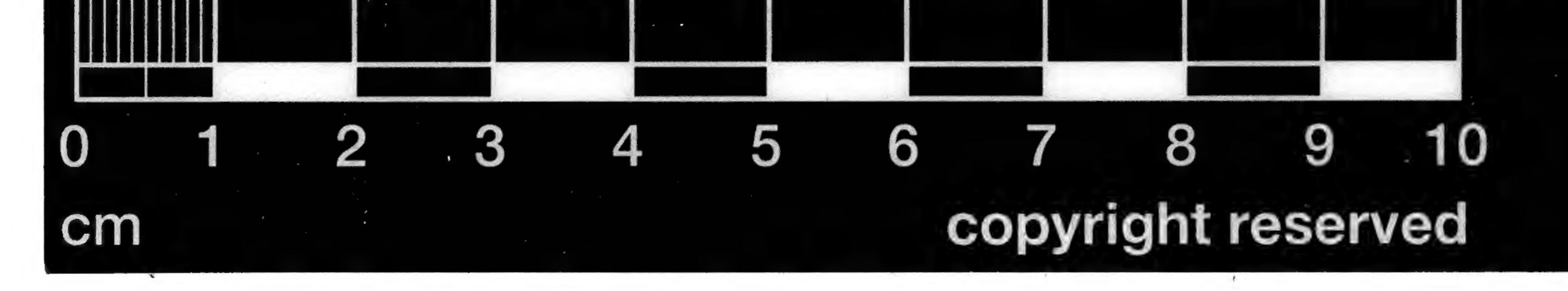
Fonscolombe par Negrarques (B. du Rb.) 2 aour 36

Monseier er honoré conspère.

Pai rem tres-exactement votre lettre du 5 Puiller dernier, ainsigne les deux publications interestantes que van avybien voule m'adelle parle meme courrier. Sai pris comnaillance sur les chènes des états - nais. La quertion que vintraites m'oslupe beaucoup dans le mimeur et j'arrive aux memes conclusions que vous par l'étude des Chenes européens et méditerranéens qui prinentent comme les votre des variations extremes et un polymorphisme qui faitobthaile à uque l'on print bien precises les limites de nos erpeur - En dessens de l'espeu progrement ditis nom avombe race outour-erpéer qui laplupar du temps a été donné emme un erpeu vraie estypique, tandingne en tealité Les caractères ne sons fixes en laisitables que Sur certain points determines er vent centre de Paire d'habitation rormale. Il en en anni de notre Guereur pubercens Wild. du midi de la France

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Ici, il for for Euronnaissable erdiffere nontwelmen parle publicence der Jewetts, man parle pour de 9. sobus tettiliflera, man en sementano vento nordes les mintagnes on voit peu à peu ces caractères Seffacer erlønde konve en présence du le semblén Weretable - penre qui ur du G. peduneulata c'est une sons-espèce eners, plus marqué, qui no crat que dons certain dob er dans certaine régions. Surtant danne Ferrain primitif - En Suide et en Norrege, on ne tron-plur gub 9. peduneulata l'évodom la dans qui ches nons l'étend le glanlom verste hord. Guant au Guerus iser, Son poly: morphisme en tru gram er de plus il donne lieu å der hybrider en torte que bein que le G. iken Sot un dépidobalanur er le G. cocciféra un lerris avece maturation bisannuelle du gland, il y a de Vormes qui trennent d'éin et d'autre avecto cupule de l'isen er la maturation bisannuelle autre, Jemi-bisannuelle, le pour le feuilles intermédiais. Ce sont les Guerus Ausandi exprendo-coccifera Dey. (exparte) - Dam noter Continent à cot des Sexidoba: · lanura Juilly ladugue ou persistemts la dection Cerri jone le rob que posséde chez vous votre tection Melanobalanus - vom navy par de lerris et non, n'avempar de Melans Calanus - Hour avez tres bien défini les caractères défférentiels d'este tection amés : l'écaine l'aurieuse, mais cette dection en également





bien circonserit, avales caractères qui la destingura et, erpeu que vanti attubus, dans un memoris danin de Oersted, mour depuis; il a teulemens applique à le Sour genre la dénomination de Erythrobalanus. _ Nur probable, comme von, Co diter que cette Section a en antrefin 2, representants Vothber in Europe - To pourrais Riverel Souhaite vous envoyer des calques des espèces tertéaire. miena caractersoi qui me paraistent avoir appartenu à legroupe - Dant'éocène tres-inferieur de Gilinden en Delgige dom j'étude la fors dans a moment j'ai rencontre de tres beaux chemes qui ont du Oppartenis aux Section Lepidobalamer es Cerris - Cerr hutent certain pour celle ci - C'err Almhant, dans l'éviene Luperieur des gyptes d'Aix, quej- renembre enembre des Chènes qui repro: duisent 6 type des Guerrus iles, es dantre par derbywerens Phellos, et imbricaria et virens - Les deun premiers appartenant aux Erythrobalanus on Melanobalames revilens lequeme probable de att Section a Copin de l'accen, en Surope -Un pen plur tard, j'ai signale dane l'Olybeen de Chener a fewith lober a lober anguleur, pen nombreux et muronis au Sommer qui lentreut envor dande mem fection - ce sont besqueras Curreifolis, armota, objedente = Leulement Ce upeter our de été pourvoir le feuille, cortainel

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herristantes - on dévait des gruerius Caterbai et ilicifolis à feutle fermes exploratete, que celles des formes vivantes cadregues. - Li vons derre des détails je me perai un plaisit & vinele envoyer. Ho vons enverai auti plusieurs d'un jublication. mais j' huis actuellement - la campagne of m'ai par mes livre som la main. In retour j. me recommande à vous; vous pourry me sendre un grand dervice en me procuraur der échantellens sees de vos chènes bein nomme, ave indication de la Hateon - Le Sontacternis particulierement ber erpées hurivantes: Guereus, Dumosa, émoryi, reticulata, Cheysolopis. G. umdala. Guerus agrifolia - hypolenia, pumila -Querun laurifolia - Cinera Querus Wisligeni - 9. mystifolia -Nous enveries le paques à m. Lesquereur quimbe férait parter - en revambe Aus å volu des kontien De vous demercie envolve envolve vons presente l'expression de me Sentiments bre devous MISSOURI BOTANICAL GARDEN G. De Saposta GEORGE ENGELMANN PAPERS

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De Saporta

George Engelmann Papers.

Letter from De Saporta - received Aug. 18, 1876 answered April 23, 1880

Fonscolombe by Meyzarguer 1B. du Rhone

August 2, 1876

Sir and Honored Colleague,

I just now received your letter of July 5th as well as the interesting publications which you have addressed me in the same mail. I learned with greatest interest of your beautiful work on the oaks in the United States. The questions that you deal with occupies my time at the moment and I have arrived at the same conclusions as you have in the study of the European and Mediterranean oaks. These, like yours' have extreme variations and a polymorphism which hinders us from being more precise in the limitations of our species. Among these species we have a family of subspecies which most of the time was considered a true and typical one, while in reality its characteristics are only defined or well established in the center of certain normal habitats.

As an example of this we have our own Quercus pubescens wild from the south of France. Here it is very recognizable and differs not only by the pubescens of the leaves but also by the pores of the Quercus robur sessiliflora. On climbing towards the north of the mountains one sees less and less of these characteristics as one finds oneself in the presence of the Quercus sessilifora. In regards the Quercus pedunculata it is a more distinguishable subspecies which grows in certain soils and certain regions specially in primitive terrains. In Sweden and Norway one finds only the Q. pedunculata which around here is rare and found far away in the north. The Quercus ilex are polymorphous and very big, producing a type of hybrid which instead of being a Q. ilex is a Lepidobalanus and the Q. coccifera is Cerris with biannual maturation of the acorn. There are some which can be of one or the other with the cupula of the ilex and the biannual maturation of the coccifera. The pores and leaves of the Q. auzandi are intermediary pseudo coccifera (in part defunct). On our continent, close to the Lepidobalanus family the deciduous leaves persist. The Cerris

De Saporta

plays the same role as the Melanabalanus which you have; you have no Cerris and we have no Melanobalanus.

You have defined very accurately the differential characteristics of that very curious American type, but that is very well circumscribed with the characteristics that distinguish it from the species you have attributed them to. In a memoir from Dane Oersted (who has since died) he only applied to this subgender the denomination of Erythrobalanus.

It is possible, as you have mentioned, that at another time this type had fossil representatives in Europe. I could send you copies of the tertiary species with the same characteristics that belonged to that group.

In the earliest eocene of Gelinden in Belgium where I at this moment study the flora, I found many beautiful oaks which belong to the groups of Lepidobalanus and Cerris, mostly the latter. In the upper eocene of the terraine in Aix I found oaks that produced types of Quercus ilex; others were big Quercus phellos imbricaria et virem. The first 2 belong to the Erythrobalanus or Melanobalanus, revealing the presence of that section of eocene which is found in Europe.

Later I reported that in the oligocene there are a few oaks with angulated and lobulated leaves. These are similar to the Quercus cunifolis armata oligondota. However they have stringy leaves similar to the Quercus caterbais and iliciforlis. These have small closed leaves similar to the deciduous live forms.

If you would like details it will give me great pleasure to send them to you. I will also send you several of my publications but presently I am in the country and do not have my books at hand.

On my return I would like you to do me a great service by sending me samples of your well classified oaks with an indication of their type. I would specially like the following species: Quercus dermosa, emoryi, reticulata, cheysdepis, and umvulata. Also Quercus wislizens and Q. myrlifolia.

De Saporta

You may send the package to Mr. Lesquerian who will then give it to me. I will otherwise also be at your service.

I thank your again for your message and send you my special and devout regards.

DeSaporta

Translated 3.22.96 by Manfred Thurmann.

par le Fuy-Stiffepasade kërcher Monsieut, d'ai sem avu grand plaisir er lai avue un vif interet votu memorie hu legeme Tinus gur vans averbuin vinla mådreller aver une lette d'envir date du 23 avril -Depuis a moment j'ai et prerque togens absent egen må prive L Skonnen e van éenir es 2 vans a couter rélèption du memorir et l Bein gur forrabrorb. narla botanique soule si ne neglig e perutant Par entièrement les plantes vivantes. De minterette tryons vivomens aun chenes du midid l'éurope er j'ai commencé la pliblication de

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mes études dur cetyper danne Mulletin de noter Louiete botanique de Province, Jauran Schonneur de vous envoyen pluster le lésage à part & ce petet bavail. Dai aignes la consiction que l'hybrideté Contribu largement à la paissance et à la permanence de certaine, saus ambiguis que relient partout les unes aux autres les expères en contact d'une même region. L'influence du pellen etranger viens presque toujours affecter les organies emelle, d'une especiel vivant vole à lote d'une autre enpieu, et les saus hybrides un Non producte, eller reportereis len tour à l'aire d'influences pollinique? L'mane noture d'on tortene å leur tom dyrase, pluser mories melinge, era diters degres 2. metastage. notu guereus Ausendi 93. es Got. en certainement formi par un ensemble

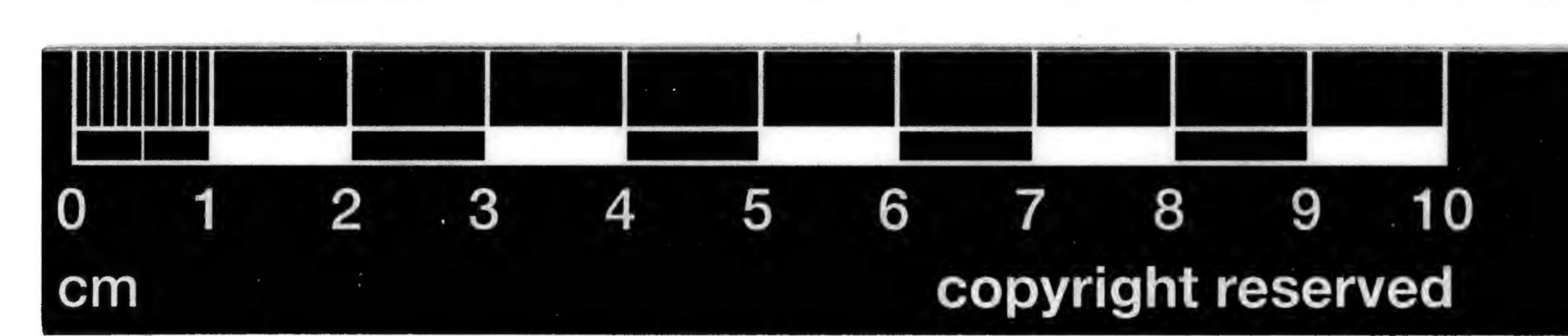
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de formes entaches d'hybridet et relians entreun les guerres ésen et coccissesa-Les querem perunculata en pubercens ous pour intermédiaire le querus a jennema ten. et jai meme Deurd Fortugal de form Auperter D'hybridete qui rejoignons & Querus lustanius es pesuneulata qui esnittent ensemble dannée noud de la Segun - j. penne guil duit en etu de même en Amèrique es vos observateur hub, chen I cette begins temo our aux memes résultats, à regréssemé Venille seher Monseur recevis mes remercionnents et agree l'angreen: de mes seulemans afferlær devoning mind de jorda

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MISSOURI BOTANICAL GARDEN GEORGE ENGELMANN PAPERS



Missouri Botanical Garden George Engelmann Papers

> M.De Saporta Fonscolombe at Puy-St.Réparade 1B de Rhone

July 15, 1880

Very esteemed Sir,

I received with great pleasure and read with keen interest your memoir on the gender Pinus that you were kind enough to send me with a covering letter dated April 23.

From that day on I have been absent nearly all the time. This has deprived me of the honour of writing you and acknowledging the receipt of your memoir and your letter.

Even though I am very absorbed by fossil botany, I have in the meantime not been entirely negligent of the living plants. I am always vividly interested in the oaks from the south of Europe and I have begun the publication of my studies on this subject in the Bulletin of our Société botanique et horticole de Provence. I will have the honor of sending you a reprint of this small work¹.

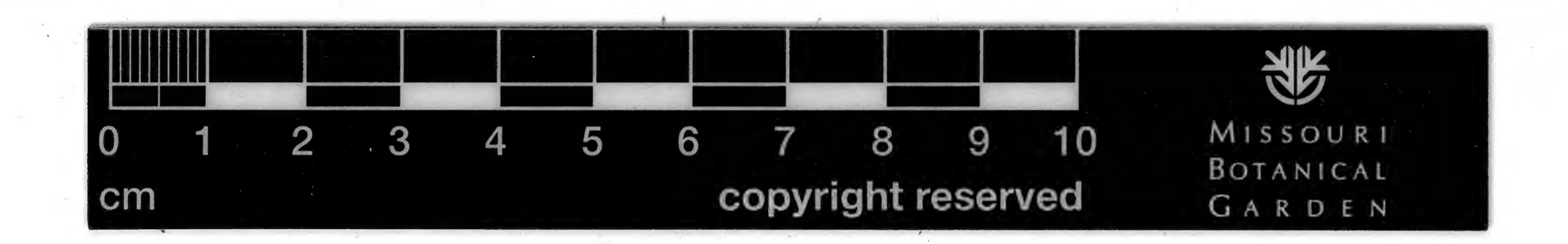
I have arrived at the conviction that hybridization contributes in great part to the birth and permanence of certain ambiguous families which link up everywhere with similar species with which they are in contact in the same region. The influence of non-familiar pollen will nearly always affect the female organs of a species living side by side with another. The hybrid families once produced, will then in turn perpetuate themselves with the influence of pollination of the same type and will become more or less mixed with diverse degrees of crossing. Our Quercus Auzendi Gren. et Godr. (Auzandri-DeCandolle SGE) is certainly formed by a combination of hybrid types among which are the Quercus ilex and coccifera.

The Quercus pedunculata and pubescens have as intermediary the Quercus apennina. Ten. I have received from Portugal types which are suspected to be hybrids which have rejoined the Quercus lusitaria² and pedunculata, which grow together in the north of that region. I think in America that would be the same. Your observations on oaks of that region have given similar results, it seems to me.

Please, daer Sir, receive my thanks and expressions of my sentimental affection.

Yours, M.deSaporta (signed)

Transl.3/26/96 Manfred Thurmann corr.by Eliasson 4/24/96.



¹This reprint is in the Trelease catalogue.It can no longer be found. A new reprint has been ordered.SGE

²Not found in floras. SGE