sections have grown progressively worse until practically every plant has been destroyed. With a few exceptions, those areas with a reduced salinity are making the best return, notable among these are portions of Chesapeake Bay, Maryland, Shinnecock Bay and Mecox Bay, Long Island, New York, and Swanquarter, North Carolina. Areas that show little or no improvement include Woods Hole, Massachusetts, South Oyster Bay, Long Island, New York., and portions of the more open and salty bays of New Jersey. Considering our entire (Atlantic U. S.) coast as a unit there appears to be some improvement although it is altogether too soon to predict what the future of the eelgrass will be.[1]

SUMMARY

1. From available evidence the eelgrass largely disappeared over the major portion of our Atlantic coast in 1893 and 1894 and it required several years before it had come back to normal abundance.
2. At least in the New England section a subnormal crop seoms to have been produced in 1908.
3. Evidence clearly indicates that there have been a number of local periods of eelgrass scarcity along the American Atlantic and European coasts.
4. In most sections the present catastrophe became abruptly evident in 1931 and 1932 with some evidence late in 1930; on the European coast, which is seriously affected, the malady was noticed first in France in the winter of 1931–32.
5. The eelgrass at present shows a perplexing condition; some areas show improvement while others do not.
6. It is much too soon to predict what the future of the eelgrass will be, although the fact that there were previous periods of scarcity or limited production of the plant, offers some encouragement to the hope that the malady will gradually pass.

UNITED STATES BIOLOGICAL SURVEY,
Washington, D. C.

A NEW VARIETY OF GLYCERIA GRANDIS AND A KEY TO ITS ALLIED SPECIES[2]

LEON KELSO

WHILE studying the new form of *Glyceria grandis* here described the writer had occasion to note the distinguishing characters of the allied species in northwest America and all Asia. Since no key has hitherto

[1] A number of short papers have appeared dealing with the recent eelgrass scarcity. As examples see Taylor, W. R., RHODORA, Vol. 35, pp 152–154 and 186; also see Cottam, C. Plant Disease Reporter, Vol. 17, No. 6, pp 46–53.

[2] Published with aid to RHODORA from the National Academy of Sciences.

been published of all these together, and because of the difficulty of the group, the following is offered.

a. Lemma distinctly 7-nerved....*b.*
b. Second glume more than 2.9 mm. long....*c.*
c. Second glume nearly equaling the lowest lemma above it, but little longer than the first glume....*G. paludificans* Komarov.
c. Second glume not nearly equaling the lowest lemma above it, ⅕ or more longer than the first glume....*d.*
d. Panicle not drooping; all nerves of lemma except two outermost reaching to near apex; stems not decumbent at base....*e.*
e. Branches of panicle not widely spreading, or, if widely spreading, the spikelets green and 7- or fewer-flowered....*f.*
f. Lemma firm, 3–4 mm. long, obtuse or truncate at apex; second glume moderately acutish; sheaths not numerously and conspicuously septate. *G. maxima* (Hartm.) Holmb.
f. Lemma thin, 3.8–4.5 mm. long, acutish at apex; second glume strongly acutish; sheaths numerously and conspicuously septate.....*G. leptolepis* Ohwi.
e. Branches of panicle at length widely spreading; spikelets 7–10-flowered; lemma entirely purple. *G. grandis* var. *Komarovii.*
d. Panicle drooping; only midnerve of lemma reaching to apex; stems decumbent at base.....*G. alnasteretum* Komarov.
b. Second glume less than 2.9 mm. long....*g.*
g. Lemma less than 4.2 mm. long; sheaths not numerously and conspicuously septate and not closely clasping stem....*h.*
h. Lemma not both pale green and papillose-scabrous under a lens, and not dentate at apex; stems not decumbent at base, except in *G. lithuanica* and rarely in *G. grandis*....*i.*
i. Lemma not broadly scarious-margined....*j.*
j. Panicle, at least in upper half, drooping....*k.*
k. Lemma 3–4 mm. long, not concave at apex; second glume 1.5–2 mm. long; stems decumbent at base....*l.*
l. Spikelets greenish.....*G. lithuanica* (Gorski) Lindman.
l. Spikelets purplish.....*G. lithuanica* f. *violacea* Neumann.
k. Lemmas 2.2 mm. long or less, concave at apex; second glume 1.5 mm. or less long; stems not decumbent at base..*G. striata* var. *stricta* (Scribn.) Fernald.
j. Panicle not drooping in upper half....*m.*
m. Panicle less than 15 cm. long; lemma with nerves excurrent at apex.....*G. natans* Komarov.
m. Panicle more than 15 cm. long; nerves of lemma not excurrent at apex....*n.*
n. Spikelets 5–7 mm. long, 5–7-flowered...*G. grandis* S. Wats.
n. Spikelets 7–10 mm. long, 7–10-flowered. *G. grandis* var. *Komarovii* (intermediate forms).
i. Lemma broadly scarious-margined....*o.*
o. Panicle more than 18 cm. long; branches not nodding; stem stout and rigid....*G. arundinacea* (Bieb.) Kunth.
o. Panicle less than 18 cm. long; its branches nodding; stem slender....*p.*
p. Panicle not decidedly nodding; glumes obovate, finely erose; stem erect....*G. pulchella* (Nash) K. Schum.
p. Panicle decidedly nodding; glumes ovate, entire; stem decumbent.....*G. lithuanica* (Gorski) Lindman.

h. Lemma pale green, shiny, papillose-scabrous under a lens and dentate at apex; stems decumbent or creeping at base....*q.*
q. Stems with branches at lower nodes; lemma 3–4 mm. long.....*G. viridis* Honda.
q. Stems not branched at lower nodes; lemma 2–3 mm. long.....*G. pallida* (Torr.) Trin.
g. Lemma 3.8–4.5 mm. long; sheaths numerously and conspicuously septate and closely clasping stem.....*G. leptolepis* Ohwi.
a. Lemma 5-nerved.....*G. pauciflora* Presl.

GLYCERIA GRANDIS var. **Komarovii**, var. nov., spiculis 7–10 mm. longis, 8–10-floris; lemmatibus 2.8–3.5 mm. longis.—Spikelets and lemmas larger, deep rich purple; sheaths strongly purple-tinged, otherwise similar to the species, into which it intergrades. YUKON TERRITORY: Dawson, July 17–19, 1909, *A. S. Hitchcock* no. 4362 (TYPE in U. S. Nat. Herb.); White Horse, July 14, 1909, *A. S. Hitchcock* no. 4361½. ALASKA: Fairbanks, open swamp along road, Aug. 2–10, 1909, *A. S. Hitchcock* no. 4596; Salcha Slough, June 24, 1922, *O. J. Murie* no. 309.

I take pleasure in naming this plant after Dr. V. L. Komarov, who has done more than any other to clear up the taxonomy of the Asiatic members of the genus *Glyceria*.

WASHINGTON, D. C.

THREE INTERESTING NEW PLANTS FROM WALLOWA COUNTY, OREGON[1]

M. E. PECK

THE northeast corner of Oregon, which includes the Wallowa Mts. and the western wall of the Snake River Canyon, has yielded a large number of interesting endemic species, and its resources in this particular are apparently not yet exhausted. During the past season (1933) the writer spent a month collecting in this section of Oregon, which is no less remarkable for the richness of its flora than for the magnificence of its scenery. The three following species were among the botanical rarities secured.

BOLANDRA **imnahaənsis**, sp. nov., caule e rhizomate parvo bulbulis circumdato, gracile infermo erecto vel languescente 2.5–5 dm. alto glanduloso-puberulo; foliis reniformibus tenuibus fere glabris, infimis 3–7 cm. latis in petiolis 2–2.5 cm. longis 5–7-sectis, lobis paucidentatis dentibus rotundis vel acutis, foliis caulinis inferioribus brevipetiolatis stipulis magnis foliosis, superioribus sessilibus amplectentibus profunde dentatis; floribus multis laxe paniculatis in pedicellis

[1] Published with aid to RHODORA from the National Academy of Sciences.