This article was downloaded by: [University of Auckland Library]
On: 11 February 2015, At: 16:52
Publisher: Taylor & Francis
Informa Ltd Registered in England and Wales Registered Number:
1072954 Registered office: Mortimer House, 37-41 Mortimer Street,
London W1T 3JH, UK

Transactions of the Botanical Society of Edinburgh

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/tped18>

Additions To The Flora Of Orkney, As Recorded In Watson's "Topographical Botany," Second Edition

Colonel H. H. Johnston C.B. D.Sc. F.R.S.E. F.L.S.

Published online: 29 Nov 2010.

To cite this article: Colonel H. H. Johnston C.B. D.Sc. F.R.S.E. F.L.S. (1917) Additions To The Flora Of Orkney, As Recorded In Watson's "Topographical Botany," Second Edition, Transactions of the Botanical Society of Edinburgh, 26:1-4, 207-217, DOI: [10.1080/03746601709469324](https://doi.org/10.1080/03746601709469324)

To link to this article: <http://dx.doi.org/10.1080/03746601709469324>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

TRANSACTIONS
OF THE
BOTANICAL SOCIETY OF EDINBURGH.

SESSION LXXVIII.

ADDITIONS TO THE FLORA OF ORKNEY, AS RECORDED IN
WATSON'S "TOPOGRAPHICAL BOTANY," Second Edition.
By Colonel H. H. JOHNSTON, C.B., D.Sc., F.R.S.E.,
F.L.S.

(Read 15th January 1914.)

This paper forms a continuation of the one on the same subject which I read before the Scottish Natural History Society on 4th April 1895, and which was published in "The Annals of Scottish Natural History," July 1895. Chiefly on account of my having been so much abroad, I have done no botanical work in Orkney since 1895, with the exception of the summer and autumn of 1912 and 1913, during which two years most of the plants mentioned in this paper were collected.

Before and since the publication of the second edition of Watson's "Topographical Botany," in 1883, several of the plants mentioned in the following list have been recorded from Orkney by me and others; but, as the value of botanical records is greatly enhanced by the possession of authentic specimens, I have included in this list the names of all specimens in my herbarium, which are either additional to, or confirm doubtful records of, the plants recorded from county No. 111, Orkney, in the second edition of the above-mentioned work.

In the case of those plants which have already been

recorded from Orkney, references are given in the following list, under each species and variety, to the books in which the records have been published. These records are principally contained in the Annual Reports of the Botanical Exchange Club of the British Isles; "A New List of the Flowering Plants and Ferns of Orkney," edited by W. A. Irvine Fortescue, and published in "The Scottish Naturalist," 1882-1884; and "Supplement to Topographical Botany, ed. ii.," by Arthur Bennett, published in "The Journal of Botany," 1905.

The nomenclature followed is that of the second edition of Watson's "Topographical Botany," except in the case of species and varieties which are not recorded in that work. In the latter case the nomenclature adopted is that of "The London Catalogue of British Plants," tenth edition, 1908.

Non-native plants, which have become naturalised in Orkney, are distinguished by a * prefixed to the names, and the names of casuals are printed in italics.

Of the 31 species and varieties recorded from Orkney in the following list, 27 are native, 1 is naturalised, and 3 are mere casuals introduced into Orkney through the agency of cultivation.

ABBREVIATIONS.

"Annals Scot. Nat. Hist." = The Annals of Scottish Natural History. Bennett, "Suppl. Top. Bot." = Supplement to H. C. Watson's Topographical Botany, second edition. By Arthur Bennett, 1905.

"Bot. Exch. Club Report" = Report of The Botanical Exchange Club of the British Isles, at present called The Botanical Exchange Club and Society of the British Isles.

"Journ. Bot." = The Journal of Botany.

"Scot. Nat." = The Scottish Naturalist.

Watson, "Top. Bot." = Topographical Botany. Second edition. By H. C. Watson, 1883.

CORRECTIONS.

As "The Annals of Scottish Natural History" has ceased to be published, I take this opportunity of correcting two mistakes which occurred in my paper published in that magazine in July 1895, viz. :—

On page 176 *for* *LUPINUS PERENNIS, *Linn.*, *read* *LUPINUS NOOTKATENSIS, *Donn.*

On page 179, *after* PYROLA ROTUNDIFOLIA, *Linn.*, *delete* "Rousay, A. R. Duguid; and Rousay, 30th July 1881,

James Reid. Native. The specimen collected by Dr. Duguid was given to me by Miss Mary Gold, who received it from Dr. Duguid," and *substitute* the following:—Rousay, August 1869, Miss G. Gold; and Rousay, 30th July 1881, James Reid. Native.

CLASS I.—DICOTYLEDONS.

FUMARIA PURPUREA, *Pugsley* (*fide* Arthur Bennett).—Turnip-field, Swanbister, Orphir, Mainland, 27th August 1880, Henry Halcro Johnston. The same specimens were identified as *F. PALLIDIFLORA*, *Jord.*, *var. BORÆI*, (*Jord.*), by the late Dr. J. T. I. B. Boswell.—Oat-field, 80 feet above sea-level, Brims, Waas, Hoy, 4th August 1913, H. H. Johnston. A weed of cultivation at both stations. See "Scot. Nat.," No. xlvii., July 1882, p. 322; "*FUM. BORÆI. Segregate*," in Watson, "*Top. Bot.*," ed. ii., 1883, p. 25; and "*F. BORÆI, Jord.*," in "*Journ. Bot.*," vol. xxxix., August 1901, p. 267.

Trifolium agrarium, Linn. (*fide* Arthur Bennett).—Hay-field, 120 feet above sea-level, Lower 'Tween-the-Brecks, Gyre, Orphir, Mainland, 2nd August 1912, H. H. Johnston. Not native; introduced with clover seeds. Very rare.

Pisum elatius, M. Bieb. (*fide* W. G. Craib).—Vetch- and oat-field, 20 feet above sea-level, near Loch of Saintear, Westray, 23rd August 1913, H. H. Johnston. Not native; introduced with the seeds of the cultivated Common Vetch (*Vicia sativa*, Linn.).

ROSA CANINA, Linn., *var. SPHÆRICA* (*Gren.*) (*fide* J. G. Baker).—Heathery banks at burnside, 180 feet above sea-level, Berriedale, Hoy, 4th November 1913, H. H. Johnston. Native.

ROSA GLAUCA, *Vill.*, *var. CRÉPINIANA*, (*Déségl.*) (*fide* J. G. Baker).—Banks at burnside, 15 feet above sea-level, Mill Burn, Stromness, Mainland, 30th August 1912. Native. Rare.

Crepis nicæensis, Balbis (*fide* Arthur Bennett).—Hay-field, 120 feet above sea-level, Lower 'Tween-the-Brecks, Gyre, Orphir, Mainland, 2nd August 1912, H. H. Johnston. Not native; a weed of cultivation.

HIERACIUM ANGLICUM, *Fries*, "*Symb. ad Hist. Hier.*,"

1848, p. 93 (*vide* J. T. I. B. Boswell and F. J. Hanbury).—Craggs on hillside, Wart Hill, Hoy, 12th August 1880, 18th August 1881, and 20th August 1885 in the Glen of Gair, H. H. Johnston. Native. Removes "[111 Orkney]" from the "supposed errors" in Watson, "Top. Bot.," ed. ii., p. 232. See "Scot. Nat.," No. xlviii., October 1882, p. 195; "Bot. Exch. Club Report," 1886, p. 154; "Journ. Bot.," vol. xxxix., August 1901, p. 269; and Bennett, "Suppl. Top. Bot., ed. ii.," 1905, p. 49.

HIERACIUM RUBICUNDUM, *F. J. Hanbury*, in "Journ. Bot.," vol. xxx., 1892, p. 208 (*vide* E. F. Linton).—Sandstone cliffs at the seashore, 10–30 feet above sea-level, west side of Walkmill Bay, Orphir, Mainland, 19th and 20th July 1912, H. H. Johnston; and heathery and grassy cliffs at the seashore, 40 feet above sea-level, Melsetter, Waas, Hoy. 11th August 1913. Native at both stations.

Note.—The late Rev. W. R. Linton gathered specimens of a *HIERACIUM*, in my company, at the Dwarfie Hamars ("Quoys Hamars"), Hoy, on 10th August 1886, which he labelled and recorded as "*H. RUBICUNDUM*, *F. J. Hanbury*," in "The Journal of Botany," vol. xxxi., June 1893, p. 178; but his brother, the Rev. E. F. Linton, informs me that these specimens are not *H. RUBICUNDUM*, *F. J. Hanbury*, which is not recorded from Orkney in "An Account of the British Hieracia," by the Rev. W. R. Linton, 1905, p. 25. The Rev. E. F. Linton is doubtful to which species these specimens (rather poor ones) belong, but he thinks they may be *H. RUBICUNDUM*, *F. J. Hanbury*, *var. BOSWELLI*, *Linton*, which is recorded from Orkney in "The Journal of Botany," vol. xxxi., June 1893, pp. 178 and 179 (as a species), and in "An Account of the British Hieracia," by the Rev. W. R. Linton, 1905, p. 25.

HIERACIUM CALEDONICUM, *F. J. Hanbury*, in "Journ. Bot.," vol. xxvii., 1889, p. 75 (*vide* E. F. Linton).—Grassy cliffs at seashore, 20–30 feet above sea-level, Scapa, Saint Ola, Mainland, 5th July 1912, H. H. Johnston. Native. See "Journ. Bot.," vol. xxxi., June 1893, p. 178; "An Account of the British Hieracia," by the Rev. W. R. Linton, 1905, p. 26; and "Bot. Exch. Club Report," 1912, p. 263.

HIERACIUM BUGLOSSOIDES, *Arv.-Touv.*, "Les Hier. d. Alp. Franç.," 1888, p. 72 (*vide* E. F. Linton).—The same speci-

mens were identified as "*H. VULGATUM*, *Fries*," by the late Dr. J. T. I. B. Boswell. Cliffs at the seashore, west side of Walkmill Bay, Orphir, Mainland, 15th August 1881, H. H. Johnston. Native.

HIERACIUM SILVATICUM, *Gouan*, var. *TRICOLOR*, *W. R. Linton*, in "An Account of the British Hieracia," by the Rev. W. R. Linton, 1905, p. 39 (*vide* E. F. Linton).—Craggs on hillside, 430 feet above sea-level, Dwarfie Hamars, Hoy, 22nd July 1912, H. H. Johnston. Native.

HIERACIUM ORCADENSE, *W. R. Linton*, in "Journ. Bot.," vol. xxxi., June 1893, p. 196 (*vide* E. F. Linton).—Craggs on hillside, Hoy, 14th August 1879, H. H. Johnston (the same specimen was identified as "*H. VULGATUM*, *Fries*, var.—probably the same as *H. CÆSIUM*, *Fries*," by the late Dr. J. T. I. B. Boswell); craggs on hillside, 430 feet above sea-level, Dwarfie Hamars, Hoy, 10th August 1886, H. H. Johnston (in company with the late Rev. W. R. Linton, who named and described the species from the specimens collected by him on that date), and 22nd July 1912, H. H. Johnston; and sandstone cliffs at the seashore, 10-30 feet above sea-level, west side of Walkmill Bay, Orphir, Mainland, 19th and 20th July 1912. Native at all these stations. See "Journ. Bot.," vol. xxxi., June 1893, p. 197; "An Account of the British Hieracia," by the Rev. W. R. Linton, 1905, p. 65; and "Bot. Exch. Club Report," 1912, p. 264.

ARCTIUM VULGARE, *A. H. Evans*, subvar. *PYCNOCEPHALUM*, *A. H. Evans*, in "The Journal of Botany," vol. li. p. 117 (April 1913) (*vide* Arthur Bennett).

SYNONYMY :—

ARCTIUM INTERMEDIUM, *Babington*, in "Annals and Mag. Nat. Hist.," series 2, vol. xvii. p. 374 (1856); and Babington, "Manual of British Botany," fourth edition, p. 184 (1856).

ARCTIUM NEMOROSUM, *Babington*, in "Annals and Mag. Nat. Hist.," series 3, vol. xv. p. 10 (1865); and Babington, "Manual of British Botany," seventh edition, p. 197 (1874), *non* Lejeune.

ARCTIUM MINUS, *Schkuhr*, subsp. *NEMOROSUM*, *Syme*, "English Botany," third edition, vol. v. p. 25, t. 701 (1866), excl. syn.

ARCTIUM NEWBOULDII, *Arthur Bennett*, in "The Journal of Botany," vol. xxxvii. p. 342 (1899); and in "The Irish Naturalist," vol. xii. pp. 289 and 290 (1903).

Sandy banks at the seashore, Linksness, Hoy, 1st September 1875 and 31st August 1883, H. H. Johnston; roadside, near the Black Crag, Stromness, Mainland, 23rd August 1880, H. H. Johnston; shell-sandy pasture, Skaill, Sandwick, Mainland, 4th August 1886, H. H. Johnston; very rare on sandy links at the seashore, 20 feet above sea-level, Links of Melsetter, Waas, Hoy, 11th August 1913; and shell-sandy roadside, 15 feet above sea-level, The Links, Westray, 26th August 1913, H. H. Johnston. Native at all these stations. See under "ARCTIUM NEMOROSUM, *Lejeune*," in "Scot. Nat.," No. xlviii., October 1882, p. 367; Watson, "Top. Bot.," ed. ii., 1883, p. 240, in which the record of this species from Orkney is queried thus, "111 Orkney?"; "Bot. Exch. Club Report," 1883, p. 90; and "Annals Scot. Nat. Hist.," July 1895, p. 178; and under "ARCTIUM NEWBOULDII, *Arthur Bennett*," in Bennett, "Suppl. Top. Bot., ed. ii.," 1905, p. 51, in which the record from "111 Orkney" refers to the specimens collected by me at Linksness, Hoy, on 31st August 1883.

Note.—Mr. A. H. Evans, in his article on "The British Species of Arctium," in "The Journal of Botany," vol. li., April 1913, pp. 113–118, states that the "ARCTIUM NEMOROSUM" of British authors is merely a subvariety of *A. VULGARE*, *A. H. Evans*, "with comparatively sessile heads at the ends of the branchlets and apparently no other constant feature," to which he has given the name *subvar. PYCNOCEPHALUM*, *A. H. Evans*. It is not the "ARCTIUM NEMOROSUM, *Lejeune*," the description and photograph of which, Mr. Evans states, "seem to be conclusive as to its being *A. MINUS*, *Bernh.*" According to Mr. Evans, *ARCTIUM VULGARE*, *A. H. Evans*, *subvar. PYCNOCEPHALUM*, *A. H. Evans*, is that form which is usual in Scotland, extending from the Border northwards to Orkney and Shetland, while typical *A. VULGARE*, *A. H. Evans* (= *A. INTERMEDIUM*, *Lange*, and *A. PUBENS*, *Babington*, "Manual of British Botany," ninth edition, 1904, p. 217), Mr. Evans states he has not found north of Haddingtonshire and the Isle of May.

SOLIDAGO VIRGA-AUREA, *Linn.*, var. *CAMBRICA* (*Huds.*) (*fide* Arthur Bennett).—Heathery hill-top, 650 feet above sea-level, on the south-west side of Hoglinns Water, Waas, Hoy, 13th August 1913, H. H. Johnston. Native.

**INULA HELENIUM*, *Linn.* (*fide* Arthur Bennett).—Grassy bank at burnside, near the sea, 5 feet above sea-level, Burn of Stennadale, Firth, Mainland, 7th August 1913, H. H. Johnston; and ditch-side in links near the sea, 20 feet above sea-level, Links of Melsester, Waas, Hoy, 11th August 1913, H. H. Johnston. Naturalised and very rare at both stations—one clump of a few plants only at the former station, and two clumps of a few plants only in each clump at the latter station. See "Scot. Nat.," No. xlvi., October 1882, p. 369.

The aggregate species *EUPHRASIA OFFICINALIS*, *Linn.*, is recorded from Orkney in Watson, "Topographical Botany," ed. ii., p. 292, but the following segregate species are not mentioned in that book:—

EUPHRASIA BREVIPILA, *Burnat et Gremli* (*fide* E. S. Marshall).—Grassy crags at the seashore, 15 feet above sea-level, east side of Aith Hope, South Waas, Hoy, 21st July 1913, H. H. Johnston. Native. See "Journ. Bot.," vol. xxxix., August 1901, p. 270.

EUPHRASIA BOREALIS, *Townsend* (*fide* E. S. Marshall).—Stenness, Mainland, 6th August 1875, H. H. Johnston; pasture, Binscarth, Firth, Mainland, 21st August 1880, H. H. Johnston; pasture, Skaill, Sandwick, Mainland, 19th August 1881, H. H. Johnston (see "Bot. Exch. Club Report," 1881, p. 53); dry sandy pasture, Linksness, Hoy, 20th August 1885, H. H. Johnston (see "Bot. Exch. Club Report," 1885, p. 133; heathery and grassy pasture, 90 feet above sea-level, Black Crag, Stromness, Mainland, 19th August 1912, H. H. Johnston (see "Bot. Exch. Club Report," 1912, p. 273, in which the specimens from the Black Crag have been erroneously recorded as *EUPHRASIA CURTA*, *Wettst.*, but this error will be corrected in the Report for 1913); and heath at top of crags at the seashore, 130 feet above sea-level, Brims, Waas, Hoy, 4th August 1913, H. H. Johnston. Native at all these stations. The specimens from Brims have the corolla white, with dark purple lines, and a yellow spot on the throat of the lower lip, and with reference to

them the Rev. E. S. Marshall furnished me with the following remarks:—"Difficult to name with confidence; no fruit is present. But I believe it to be a dwarf, compact state of *E. BOREALIS*, *Townsend.*" This species was growing in patches near to other patches of *E. CURTA*, *Wettst.*, var. *GLABRESCENS*, *Wettst.* (*fide* E. S. Marshall), which had the corolla pale lilac, with dark purple lines, and a yellow spot on the throat of the lower lip. See "Journ. Bot.," vol. xxxix., August 1901, p. 270.

EUPHRASIA GRACILIS, *Fries* (*fide* E. S. Marshall).—Hoy, 15th August 1874, H. H. Johnston; heath, Waas, Hoy, 9th August 1877, H. H. Johnston; grassy banks at burnside, 15 feet above sea-level, Burn of Ore, Waas, Hoy, 16th July 1912, H. H. Johnston; heath at burnside, 10 feet above sea-level, Pegal Burn, Waas, Hoy, 7th August 1912, H. H. Johnston; heathery banks at burnside, 240 feet above sea-level, North Dale, Waas, Hoy, 7th August 1912, H. H. Johnston; heath on hillside, 320 feet above sea-level, Brunt Hill, Stromness, Mainland, 23rd August 1912, H. H. Johnston; and heath 200 feet above sea-level, near Rosehill, Stromness, Mainland, 30th August 1912, H. H. Johnston. Native at all these stations. With reference to the specimens from Brunt Hill, the Rev. E. S. Marshall furnished me with the following remarks:—"Difficult to name accurately, being starved. I incline to think it a reduced state of *E. GRACILIS*, *Fries*, with rather crowded leaves; the small flowers favour this. If not, it is small *E. CURTA*, *Wettst.*, var. *GLABRESCENS*, *Wettst.*" With reference to the specimens from Burn of Ore, Pegal Burn, and Brunt Hill, see "Bot. Exch. Club Report," 1912, p. 272.

EUPHRASIA SCOTTICA, *Wettst.* (*fide* E. S. Marshall).—Heath on hillside, 310 feet above sea-level, North Dale, Waas, Hoy, 7th August 1912, H. H. Johnston. Native. Remarks on my specimen by the Rev. E. S. Marshall:—"This has the habit and general appearance of *E. SCOTTICA*, *Wettst.*, and I think that it is best so named; material rather young, and not in fruit." See "Journ. Bot.," vol. xxxix., August 1901, p. 270; and "Bot. Exch. Club Report," 1912, p. 273.

EUPHRASIA CURTA, *Wettst.* (*fide* E. S. Marshall).—Pasture at edge of crags at the seashore, Ness of Ramnago, Sand-

wick, Mainland, 23rd July 1886, H. H. Johnston. Native. See "Transactions of the Botanical Society of Edinburgh," vol. xvii., 1886, p. 133; "The Gardeners' Chronicle," vol. xxvi., No. 677, new series, 18th December 1886, p. 793; and "Journ. Bot.," vol. xxxix., August 1901, p. 270.

EUPHRASIA CURTA, *Wettst.*, var. *GLABRESCENS*, *Wettst.* (*fide* E. S. Marshall).—Damp pasture on hillside, 300 feet above sea-level, Wart Hill, Hoy, 15th August 1912, H. H. Johnston; grassy banks at burnside, 270 feet above sea-level, Burn of Selta, Stromness, Mainland, 23rd August 1912, H. H. Johnston; marsh 300 feet above sea-level, Dale of Oback, Orphir, Mainland, 9th July 1913, H. H. Johnston; and heathery and grassy pasture at top of crags at the seashore 130 feet above sea-level, Brims, Waas, Hoy, 4th August 1912, H. H. Johnston. Native at all these stations. See remarks under *E. BOREALIS*, *Townsend*, on p. 213; and "Journ. Bot.," vol. xxxix., August 1901, p. 270.

EUPHRASIA FOULAENSIS, *Townsend* (*fide* E. S. Marshall).—Short pasture, 150 feet above sea-level, drenched with sea spray during storms, Vaval, Westray, 21st August 1913, H. H. Johnston. Native. Remarks by the Rev. E. S. Marshall:—"Your Westray Eyebright is the compact coast-form of *EUPHRASIA FOULAENSIS*, *Townsend*!, which Shoolbred and I found at Black Craig, Mainland, in 1900. The full-grown capsules considerably exceed the sepals; the leaves are blunt, glabrescent; the corollas small, violet." See "Journ. Bot.," vol. xxxix., August 1901, p. 270.

TRIENTALIS EUROPÆA, *Linn.*.—Heath, 200 feet above sea-level, Kingsdale, Firth, Mainland, 9th July 1913, H. H. Johnston. Native. Removes the ? after "111 Orkney?" in Watson, "Top. Bot.," ed. ii., p. 335. This species was first discovered in Orkney at the above-mentioned station, in June 1847, by the late Mr. George Robson. See MS. "Flora Orcadensis," by Alexander R. Duguid, M.D., 1858; and Bennett, "Suppl. Top. Bot., ed. ii.," 1905, p. 68.

CLASS II.—MONOCOTYLEDONS.

CAREX EXTENSA, *Good.*, var. *MINOR*, *Syme* (*fide* Arthur Bennett).—Stony ground near the seashore, 130 feet above sea-level, North Hill, Westray, 28th August 1913, H. H. Johnston. Native. Removes "Lost" from "111 Orkney."

Lost? Syme cat." in Watson, "Top. Bot.," ed. ii., p. 461. The late Dr. J. T. I. B. Boswell found the *var.* MINOR, Syme, in the Fidge, Orphir, Mainland, in 1849, but in his catalogue of Orkney plants he has entered the remark "Extinct 1875?" opposite the name of this variety. Prior to 1849 the Fidge was liable to be flooded with sea water; but, about that year or shortly thereafter, an embankment and sluice were constructed to prevent the flooding. See "Scot. Nat.," No. ii., new series, October 1883, p. 73.

CAREX FULVA, *Host.*, × OEDERI, *Retz.* (*fide* Arthur Bennett).—Pasture at lochside, 15 feet above sea-level, Loch of Saintear, Westray, 23rd August 1913, H. H. Johnston; and pasture at lochside, 8 feet above sea-level, Loch of Swartmill, Westray, 6th September 1913, H. H. Johnston. Native, and very rare at both stations. At the former station a small clump of this hybrid was growing in the middle of a much larger clump of CAREX OEDERI, *Retz.* (*fide* Arthur Bennett).

AVENA PRATENSIS, *Linn.* (*fide* Arthur Bennett).—Very common on sandy links at the seashore, 20 feet above sea-level, Links of Melsetter, Waas, Hoy, 11th August 1913, H. H. Johnston. Native. Each spikelet has one awn only, instead of two or three awns as usually occurs in this species. Remark by Mr. Arthur Bennett:—"Your plant seems to agree with Norman's *f.* PAUCIFLORA, 'Fl. Arcticae Norvegiae,' p. 54, 1893." See "Scot. Nat.," No. iii., new series, January 1884, p. 110.

GLYCERIA PLICATA, *Fries* (*fide* Arthur Bennett).—Marsh 20 feet above sea-level, Burn of Ore, Waas, Hoy, 29th July 1913, H. H. Johnston. Native. Removes the ? "doubtful" after "111 Orkney ? 'doubtful'" in Watson, "Top. Bot.," ed. ii., p. 488. See "Scot. Nat.," No. iii., new series, January 1884, p. 111; "Journ. Bot.," vol. xxxix., August 1901, p. 274; and Bennett, "Suppl. Top. Bot., ed. ii.," 1905, p. 105.

FESTUCA SCIUROIDES, *Roth* (*fide* Arthur Bennett).—Shell-sand and shingle at the seashore, 5 feet above sea-level, Bay of Skail, Sandwick, Mainland, 27th September 1913, H. H. Johnston. Native. Removes "(111 Orkney)" from the "non-indigenous plants" in Watson, "Top. Bot.," ed. ii., p. 495. See "Scot. Nat.," No. iii., new series, January

1884, p. 111 ; and Bennett, "Suppl. Top. Bot., ed. ii.," 1905, p. 107.

TRITICUM REPENS, *Linn.*, *var.* *LEERSIANUM*, *Gray* (*vide* Arthur Bennett).—Shell-sand and shingle at the seashore, 5 feet above sea-level, Hookin, Papa Westray, 4th September 1913, H. H. Johnston. Native. The *var.* *LEERSIANUM*, *Gray*, was growing side by side with typical *TRITICUM REPENS*, *Linn.*, on the sea-beach, and only a few yards away from *TRITICUM JUNCEUM*, *Linn.*, on shell-sandy banks immediately above the sea-beach.

CLASS III.—CRYPTOGAMS.

POLYSTICHUM LONCHITIS, *Roth.*—Clefts of rocks on hill-side, 880 feet above sea-level, Wart Hill, Hoy, 3rd October 1913, H. H. Johnston. Native. Very rare; fifteen plants only seen by me on the above-mentioned date. Removes "[111 Orkney]" from the "supposed errors" in Watson, "Top. Bot.," ed. ii., p. 513. See "Scot. Nat.," No. iii., new series, January 1884, p. 112 ; and Bennett, "Suppl. Top. Bot., ed. ii.," 1905, p. 111.

LASTREA DILATATA, *Presl.*, *var.* *ALPINA*, *Moore* (*vide* J. T. I. B. Boswell).—Stenness, Mainland, 6th August 1875, H. H. Johnston. Native. See "Scot. Nat.," No. iii., new series, January 1884, p. 113.

NOTES ON SOME RARE OR INTERESTING ORKNEY PLANTS.

By Colonel H. H. JOHNSTON, C.B., D.Sc., F.R.S.E.,
F.L.S.

(Read 15th January 1914.)

This paper contains some notes on twenty-seven species and varieties of Orkney plants collected by me, but not mentioned in my other paper, "Additions to the Flora of Orkney, as recorded in Watson's 'Topographical Botany,' second edition," communicated to the Botanical Society to-day. Of these 27 species and varieties, 25 are native, 1 is naturalised, and 1 is cultivated. The two varieties of *CHARA FRAGILIS*, *Desv.*, mentioned in the following list are new records for H. C. Watson's county 111 Orkney, and they are recorded in this paper because the *CHARACEÆ*