place and may even change with time. Common names also lack precision, a fact which often limits their usefulness. Sometimes they are confusing and misleading. We know that African violets, for instance, are not true violets, that pepper-grass is not a grass and that sow-thistle is not a true thistle. Canada thistle is a weedy invader from Europe and the same plant in New Zealand is tagged as California thistle.

It is indeed a good idea to be familiar with the scientific names of plants.

1971 BOTANICAL RECORDS FOR SASKATCHEWAN

by **John H. Hudson,** 103 Richmond Crescent, Saskatoon

The 1971 collecting season produced the best harvest of novelties for me since 1958. Here are reported two plants new to Canada, two new to Saskatchewan alone, and three seldom mentioned varieties.

Of the plants new to Canada perhaps the most interesting is *Salsola collina* Pall. I collected it as #2749 on August 17, 1971 at Estevan, "C.N.R. tracks, soil cindery and very drouthy, abundant." A couple of weeks later, back in Saskatoon, I visited the downtown C.N.R. yards to see how *Eragrostis poaeoides* as reported by Hudson (1971) was surviving (very nicely, thank you) and found more *Salsola collina*, collection #2754 of September 3, 1971, "downtown C.N.R. yards west of 600 block 1st Avenue, soil dry and cindery." This plant, in the same genus with ordinary Russian Thistle, appears as a less branchy, more erect, version of the famous weed with a hint of *Kochia* about the flowers. Technically, the mature calyx lacks the horizontal wing so prominent in *Salsola kali*, while the inflorescence tends to be in terminal inconspicuously bracted spikes. In Russian Thistle axillary flowers are numerous, while such flowers as are in terminal spikes are conspicuously bracted with the noxious prickles. One gathers *Salsola collina* is little of a tumbleweed; on a railroad embankment in L.S.D. 3 of 31-1-VI W2nd, 3 mi. E. of Roche Percee, on May 3, 1971, I had found a plant described in my notes as "a dead Goosefoot Family annual I don't know, like *Salsola* but not quite so spiny, and with tough, not shattering, stems." When in August I got back to the site, the next generation of these annuals turned out to be *S. collina*.

This *Salsola collina*, a native of Soviet Middle Asia, was reported in Minnesota by Pohl and Gillespie (1959). Then Stevens (1961) reported it for North Dakota, with collections going back to 1949. It is also keyed and mapped for Montana by Booth and Wright (1966). It is not in Boivin (1966) so presumably is new to Canada. This one seems to be spreading largely by rail — I have not yet seen it away from railroad tracks.

A hitherto unreported desert shrub for Canada is what I have taken to be *Suaeda intermedia* S. Wats., collected as #2762 on September 23, 1971 on "bare exposed S-facing outcrops and crags of 'Redeposited Ravenscrag' formation on NE¼ 21-1-X W3rd, alt. 3000'." This plant looked much like a small Greasewood, with terete fleshy leaves, but these distributed all around the unbranched and brittle shoots of the year which radiate in every direction from the woody base. Flowers and fruit were poorly displayed due to the lateness of the collection (and the dryness of the summer?); no seed appeared to have been set, but the flowers seemed to have been in axillary glomerules scattered towards the ends of these shoots of the year. Boivin (1968) weighed a Hitchcock (1964) report from Alberta and found it wanting, so presumably this is new to Canada.

The habitat of this shrub is very

striking. The valley of the Frenchman river 25 miles southeast of Val Marie, where it turns from S.E. to S.W. just before crossing the Line, attains a depth of some 500 feet below prairie level. Consequently, the valley slopes abound in precipitous buttes and cut-banks, largely developed in dull grey Bearpaw shale. Above the Bearpaw and below the thin brown glacial drift, however, is a formation of some 10-50 feet of buff calcareous silt, very conspicuous at a distance, whose coaly streaks class it as non-marine; its age is uncertain. On these beds *Suaeda intermedia* was found; it was not seen above or below.

In the course of taking my daughters to the Saskatoon Animal Park I was halted before the paddock of the Japanese Sika Deer watching the 2-year-old feed the deer and idly regarding the much-trampled vegetation in the paddock; it consisted of nettles and biennial wormwood amid bare trodden ground. I must have been looking at the nettles five minutes before the realization seeped into my consciousness that the nettles were wrong—the leaves were half size and ovate instead of lanceolate. Upon collecting the nettles through the fence, I discovered them to be taprooted annuals, and were therefore *Urtica urens* L. The collection is #2756 of September 4, 1971. The plant is a world-wide weed of Eurasian origin, reported for Manitoba and Alberta, as well as the rest of Canada, but not Saskatchewan, by Boivin (1967). I should imagine that we are constantly being inoculated with the seeds of so widespread a weed, but that for some reason or other it takes hold only under rare favourable conditions. Competition would be much reduced in zoo enclosures. As the animals in the Animal Park are to be transferred to the old Forestry Farm, the future of *Urtica urens* in Saskatoon is uncertain.

Another rare introduced weed was brought to me from his home area, Gronlid, by a co-worker of mine, Mr. Bernie Zuk. A first specimen in a dried but unpressed state was given to me about September 12; upon determining it as *Spergula arvensis* L. or Spurrey, a common weed of moister climates in Eurasia and North America, I asked him to collect more into a plastic bag so that it would arrive fresh for pressing. This he did as "#2765, October 11, 1971, NW¼-15-48-XVII W2, summerfallow field on light soil, very frost-resistant." This *Spergula arvensis* looks like a horsetail but with flowers, being in habit an annual with many recumbent stems, leaves numerous and thread-like in well-spaced whorls, and small sandwort-like flowers in terminal cymes, the flower stalks becoming reflexed in fruit. Moss (1959) attributes it to Alberta, while Boivin (1968) by writing "—(Man S)—Alta—" signifies that he has read of reports of the plant from Manitoba and Saskatchewan but not seen any collections. Breitung (1957) and Scoggan (1957) do not report it.

So much for the novelties. Three other little reported plants I ran across during the summer are worth mention; these are *Scirpus rufus, Scirpus pumilus*, and *Boltonia asteroides*.

Scirpus rufus (Huds.) Schrad. was collected by me as #2711, July 4, 1971, abundant to dominant in more saline and more stagnant parts of large spring-fed bog SW¼-24-31-IV W3rd, 3 mi. N. Hanley; also as #2724, July 16, 1971, spring-fed marl bog, near shore, somewhat saline conditions, soil black smelly reducing muck, W. edge SW#-26-34-XIII W3rd, 4 mi. S. and 2 W. of Keppel. I also saw this at a bog 8½ mi. N. of Kinley on L.S.D. 8 in 13-37-XI W3rd on September 12, 1971. This *Scirpus rufus* was reported from a bog near Sutherland by W. P. Fraser (1940), and I have seen it in two Sutherland bogs, one on SE¼ 11 and other on NE¼ 11, both in 37-V W3rd. There is a Pike Lake report in Fraser and Russell (1944) but the material in the Fraser Herbarium is all from Sutherland. One may describe *Scirpus rufus* as superficially like the common *S. americanus* (Three-Square Bulrush) in size, habit and colour, also in the single terminal spikelet, often

so bracted as to look falsely lateral, but differing sharply in the scales of the spikelet being 2-ranked rather than spirally arranged.

Scirpus pumilus M. Vahl was collected as #2722, July 16, 1971, on moss of spaces between pools just outside *Salix candida* zone in spring-fed marl bog SW¼ - 26 - 34 - XIII W3rd, south of Keppel. It was also seen in the above-mentioned Kinley bog September 12. The only previous report of this in Saskatchewan was given from a Sutherland bog by W. P. Fraser (1940). He does not give the land number, so it is hard to say which bog is meant. I have been unable to find it in the two Sutherland bogs with survey numbers given under *S. rufus*. This failure proves nothing, for *Scirpus pumilus* is as inconspicuous as a plant can well be and still photosynthesize. It just cannot be seen from a standing position — one must kneel. The plant consists of a single ovoid spikelet at best 3 mm long mounted on a threadlike stem some 6-10 cm high carrying one reduced and usually withered leaf some 6-10 mm long low down (field distinction from the genus *Eleocharis)*. These culms are not even bunched but scattered, the plant being rhizomatic. The best way to locate *Scirpus pumilus*, I found, is to look for *Lobelia kalmii* and then hunt around thereabouts.

Boltonia asteroides (L.) L'Her. is, on the other hand, very conspicuous but well camouflaged. As I was driving to Estevan at highway speeds August 8, 1971, there seemed to be a great deal of *Aster hesperius* in the heavy clay soil of the road ditches from Corinne south-east on #39. Presently these asters began to look oddly flat-topped in the inflorescence; this aroused my suspicions, as I recalled from floral lists that the pseudo-aster *Boltonia* had been reported from not too far away. Finally, I stopped and examined a stand, which proved to contain both *Boltonia* and *Aster hesperius*. The *Boltonia* was collected as #2740, August 8, 1971, "roadside ditch in Regina Heavy Clay, soil wet earlier, S. edge L.S.D. 3 in 6-12-XVIII W2nd", between Milestone and Lang. *Boltonia asteroides* looks almost exactly like *Aster hesperius* save for being wholly glabrous and having a tendency towards a flat-topped inflorescence. The botanical distinction is that the achenes lack the usual Composite pappus (tuft of hairs serving for wind dispersal of the seed) but instead have merely a couple of awns (like *Gaillardia)*. The plant has been reported by Breitung (1957) from Weyburn and Torquay. Further travel along #39 showed *Boltonia* to be thickly abundant from Milestone to Yellowgrass, but decreasing as the Regina clay decreases from Yellowgrass south to McTaggart, and absent south thereof; while north again it ended almost sharply between Milestone and Corinne — possibly from encountering the end of its climatic preference, for certainly the habitat remained unchanged.

Duplicates of these collections have been sent to the Fraser Herbarium of the University of Saskatchewan and to that of the Central Experimental Farm at Ottawa.

LITERATURE CITED

Boivin, B. 1966. Enumeration des Plantes du Canada. Salsola in Le Naturaliste Canadien 93[5]. p. 622.

Boivin, B. 1967. Flora of the Prairie Provinces, part I. Urtica in Phytologia 15[6], p. 422.

Boivin, B. 1968. Flora of the Praire Provinces, part II. Spergula in Phytologia 16[4], p. 315. Suaeda, ibid 17[2], p. 68.

Booth, W. E. and Wright, J. C. 1966. Flora of Montana, Pt. II. Montana State University, Bozeman.

Breitung, A. J. 1957. Annotated Catalogue of the Vascular Flora of Saskatchewan. Am. Midland Nat. 58[1], 1-72.

Fraser, W. P. 1940. Notes on the Cyperaceae of Saskatchewan. I. Scirpus. Can. Field Naturalist 54[7], 100-101.

Fraser. W. P., and Russell, R. C. 1944. A Revised Annotated List of the Plants of Saskatchewan. University of Saskatchewan, Saskatoon. 64 pp.

Hitchcock, C. L. and others. 1964. Vascular Plants of the Pacific Northwest Part 2. University of Washington Press, Seattle.

Hudson, J. H. 1971. Of Eragrostis and Range Extensions; 1970 Botanical Remarks. The Blue Jay 29[2], 96-98.

Moss, E. H. 1959. Flora of Alberta. University of Toronto Press.

Pohl, R. W., and Gillespie, J. P. 1951. Distributional and Cytological Notes on Salsola collina. Rhodora 61, 265-7.

Scoggan, H. J. 1957. Flora of Manitoba. National Museum of Canada Bull. #140, Ottawa.

Stevens, O. A. 1961. New Records for North Dakota. Rhodora 63, 39-46.