- 10. The PANSY (*V. tricolor2*) is a large-flowered annual plant introduced from Europe, which is commonly cultivated and may casually reseed itself in and aroungardens. The cultivated pansy is the product of horticultural hybridizations and many different colour and size forms occur. The flowers of escaped plants are usually 1/2 to 1 inch wide, although the flowers are often larger under cultivation. The petals are widely spreading, about twice as long as the sepals, variously multicoloured with purple, yellow and white, and with yellow centers. The upper petals are usually darker coloured than the lower ones. The flowering stems are leaf and often branched from the base. The lower leaves are circular or heart-shaped; the upper ones are narrower. The stipules are leaf-like, about as long as the leaves, and the edges are dissected from the base into narrow segments. This species sometimes it also called Heart's Ease, Ladies-Delight or Johnny-jump-up.
- 11. The WILD PANSY or JOHNNY-JUMP-UP (*V. rafinesquii*) is a rare in troduced annual plant from Eurasia. The only Saskatchewan report has been from grain field at Tisdale. The plants have slender, leafy flowering stems which ar hairless and often branched at the base. The leaves are small, only 1/4 to 1/2 inc wide. The lower leaves are nearly circular, smooth, shallowly round-toothed, rounded at the tip. The upper leaves are narrower and long-tapering to the base. The stipules are leaf-like, almost as long as the leaves, and lobed at the base. The flower are small, less than 1/2 inch long, long-stalked, with bluish-white to creamy petal which are nearly twice as long as the sepals.

The known distribution of the eleven violet species in Saskatchewan is shown of the maps of Figure 3. Each map dot indicates a documented locality record. The distribution maps were prepared from published records and specimens in the Frase Herbarium. They still reveal a paucity of specimen records for many of the species. The discovery of new locality records, especially of the rarer violet species or form is of considerable interest to us and we would welcome any such reports particularly if documented by a pressed dried specimen. Any such information may be addressed to the Fraser Herbarium, University of Saskatchewan, Saskatoon.

Additions to the FLORAL LIST

Of Saskatchewan - 1972

by JOHN H. HUDSON*

Although I did not accomplish as much botanizing in the field season of 1972 as in some former years, yet a modicum of records never or seldom reported for Saskatchewan came my way this summer. These will now be set forth. The collection numbers are those of the author. Duplicates have been deposited in the Fraser Herbarium of the University of Saskatchewan (SASK) and, except for No. 2774, in that of the Department of Agriculture at Ottawa (DAO).

*103 Richmond Crescent, Saskatoon, Saskatchewan

No. 2772. Lotus corniculatus L Bird's-foot Trefoil, Saskatoon, S. edg SE 1/4 34-36-V W.3rd, south sid Highway No. 5 between Cumberlan and Preston Avenues, June 16, 1972 abundant with brome grass, quack gras and yellow sweet clover. This legum may be recognized by its general similarity in habit to yellow alfalfateven to the yellow flowers borne is rounded heads. However, the heads are axillary on long stalks, not terminal and the flowers are much larger, som 1.5-2 cm long overall, with a coroll bright yellow tinged with brown on the

gs. The fruits are very different from se of alfalfa, being long-cylindric, 2-m long by 2 mm in diameter, and ading in all directions from a compoint of origin.

t the spot the plant gave the imssion of having spread from ivation. It is however, not ascribed askatchewan by Boivin.² An earlier ort for Saskatchewan by Ledingham been referred by Boivin to the ely related species *L. pedunculatus*

otus corniculatus was brought to my ntion by Dr. W. Steck of Prairie ional Laboratory, National earch Council, who wanted this the identified for biochemical lies.

o. 2774. Atriplex rosea L., Rede, Regina, boulevard in the 2000 k Hamilton St., a few plants, July 1972. The plants were in flower, ch is not the right time to collect plex, as the specific characters are hly in the fruit; yet I reasoned I'd er make a collection right then in the city employees got zealous and d up the boulevard. I took only two ts for fear of reducing the colony's ice for survival too greatly. By Sepber 10, the plants had been mown, the lower branches were fruiting. such fruiting branches were added he collection.

his weed of European origin, comin the USA, is not recorded for catchewan by Breitung.³ Boivin rded it only from Ontario and B.C. anada.¹ As it is plainly a plant of mer climates, its chances for survival Saskatchewan, even in cities, are To the ordinary viewer it will just about like our Saltbush iplex patula L.) except that the es are coarsely toothed on the gins.

he find of the summer was *Polygala* icillata L., Whorled Milkwort, ected as No. 2777, on L.S.D. 12 in 2-VIII W 2nd, west of Estevan, July 1972, stony dry coulee bottom. 5, too, appears unreported for atchewan, though reported for

Manitoba by Scoggan and Boivin, and for North Dakota by Stevens. ^{8 2 9} It is a small annual with terminal racemes of pale mauve flowers and narrow linear leaves in a few whorls. It has the build of *Plantago purshii*, Pursh's Plantain, with which it was growing, but the dense terminal racemes much resemble those of *Polygala alba*, White Milkwort, which was growing here amid rocks further up the valley sides.

Apparently not a record, but still very gratifying, was the finding of Sporobolus neglectus Nash, Small Dropseed, also at Estevan. The collection was No. 2831, September 13, 1972, SE 1/4 22-2-VIII, south of Estevan hospital, arid disturbed flat of Souris River valley, soil mostly Ravenscrag sandy clay. It is not recorded for Saskatchewan by Breitung but Boivin (1967a) assigns it a range from Quebec to Alberta.³ 1 Moss gave it for Medicine Hat, which accounts for the Alberta citation.7 From Saskatchewan's being included in the range I should guess that Boivin must have collected it himself at Estevan. We have no specimens from Saskatchewan in the Fraser Herbarium.

It is hard to make up a thumbnail description of this annual grass unmistakably enough so that others may recognize it, as is my aim in these yearly notes. One may write that the narrow panicles are mostly included in the sheaths, as is the case in Common Speargrass (Stipa comata) without conveying much of a picture. The flowers and spikelets are much like those of Sand Dropseed, (Sporobolus cryptandrus), but the panicles are not at all spreading as in the latter. Perhaps the easiest field mark is that said included panicles are not confined to the tip of the culm, but that a panicle, wrapped in the sheath of the leaf, is borne in the axil of each of the 2 to 6 stem leaves all the way down each culm. This is very unusual among our grasses.

In my last year's note on botanical records for Saskatchewan, *Spergula arvensis* L., Spurry, was claimed as new to the province.⁵ This is now known to be erroneous, at least two earlier records having turned up. The subject is treated

in another publication, Harms and Hudson (in press).

¹BOIVIN, B. 1967a. Énumération des plantes du Canada. Provancheria No. 6, Université Laval, Quebec; originally published in Naturaliste Canadien in parts over 1966 and 1967.

²BOIVIN, B. 1967b. *Flora of the Prairie Provinces*, *Part I*. Provancheria No. 2, Université Laval; first published in *Phytologia* in parts, 1967.

³BREITUNG, A. J. 1957. *Annotated Catalogue of the Vascular Flora of Saskatchewan*. Am. Midland Nat. 58: 1-72.

⁴HARMS, V. L. and J. H. HUDSON (in press) Some New or Noteworthy Vascular Plant Records from Northwestern Saskatchewan. Submitted to Rhodora.

⁵HUDSON, J. H. 1972. 1971 Botanical Records for Saskatchewan. Blue Jay 30: 122-4.

⁶LEDINGHAM, G. F. 1962. First Report of Lotus corniculatus in Saskatchewan. Blue Jay 20 [3], 120.

⁷MOSS, E. A. 1959. *Flora of Alberta*. University of Toronto Press.

*SCOGGAN, H. J. 1957. Flora of Manitoba. National Museum of Canada Bulletin No. 140, Ottawa.

STEVENS, O. A. 1950. Handbook of North Dakota Plants. North Dakota Institute for Regional Studies, Fargo, North Dakota.

Wildflower PHOTOGRAPHY

by G. A. HARDY*

Flowers are among the most popular, plentiful and accessible of all nature Most nature subjects. serious photographers begin with flowers. Yet too may flower pictures turn out trite and disappointing. This may be neither the fault of the subject or the photographer. It may also occur because of the difference between the way an object appears to the viewer and the way the camera records it. The mind's eye sees the flower in a three-dimensional vision that separates it from its surroundings and adjusts to motion and some color variations. The camera on the other hand sees with monocular or twodimensional vision and hence places equal emphasis on all objects within its viewing range. Hence the rose that looks so lovely to the eye may be lost amit the leaves and branches wh photographed.

Except when the photographer's of ject is to show the whole plant and surroundings from an ecological a proach, far more satisfactory results of be obtained by using some form close-up photography as outlin below. This article can only outline to subject and I commend to my readers to vast storehouse of artistic and technic knowledge available in the hundreds excellent books available.

Equipment and its use.

A single lens reflex camera is a mi since the photographer can then see the exact area that will be exposed to the film. By opening or closing the lediaphragm, the area (depth of field) sharp focus can be altered to suit the subject. A camera with interchangeablenses is best. A sturdy tripod with and vertical panhead is also a must. It subjects very close to the ground I use single leg unipod made of a 10" spi with a 1/4 x 20 threaded 1/2" screw-t



Fig. 1. Early Yellow Locoweed.

^{*}No. 803 - 640 Main Street E., Saskatoon, Saskatchewan