PLANT NOTES

197/9. Cotoneaster horizontalis Decne., 1877, Fl. des Serres, Sér. 2, 12, 168. 6, N. Som.; sparingly on limestone rocks, Crook Peak, J. P. M. Brenan (1953, Proc. Bristol Nat. Soc., 28, 307). 14, E. Sussex; Black Rock, Brighton, 1950, D. McCLINTOOK: chalky railway bank north of Waldron and Horam Station, one bush, 1952-1953; steep bank by railway bridge, Ghyll Lane, Heathfield, one bush, 1953, K. E. BULL. 15, E. Kent; chalk down, Wrotham Hill, about a dozen bushes, c. 1945-1954, D. McCLINTOCK. 17, Surrey; railway bank, Caterham, one bush, 1954, D. McCLINTOCK. 21, Middx.; bank above chalkpit, Harefield, one small bush, 1945-1954, D. H. KENT. 23, Oxon; epiphytic on a pollard willow by the river bank near Iffley Lock, 1944, J. P. M. BRENAN and Rev. N. E. G. CRUTWELL (Ref. No. 7059).

Deciduous or half-evergreen shrub of squat habit. Branches horizontal, pubescent. Leaves \pm roundish, 12 mm. or less long, mucronate, glabrous and shining above, subglabrous below. Flowers pinkish, 1-2 together, subsessile; fruit globose or ovoid, about 5 mm. across, bright red, containing 3 nutlets. Native of China. Long grown in British gardens from whence it is doubtless bird-sown to wild habitats.—D. H. KENT.

467/2. ANAGALLIS ARVENSIS L. Although the various colour forms of this species have attracted considerable attention in the past, there is one feature of their occurrence which appears to have been overlooked. This is the tendency for other colour forms to appear whenever any two grow together in one place.

As early as 1700, W. Stonestreet (ex Druce, 1926, Fl. Bucks., 225) recorded both purple and white flowers among the scarlet type near Quainton, Buckinghamshire. E. Lees (1868, Bot. Malvern Hills, ed. 3, 48) mentions scarlet, blue and white forms growing together at Astley in Worcestershire. H. Hoffmann (1879, Bot. Zeit., 37, 177) stated that he had only encountered the form with salmon-pink flowers when the scarlet and blue forms grew together, both in cultivation and in the wild. According to E. D. Marguand (1901, Fl. Guernsey, 153), blue and scarlet plants are both plentiful on the island of Jethou, Channel Isles, and among them grows a sprinkling of the form with pure white flowers. R. Scott (1953, Country Life, 114, 1223) records blue, pale pink and heliotrope plants along with the scarlet type in a beet field in Norfolk. N. F. McMillan (1953, Proc. Liverpool Nat. Field Club, 19) has found single specimens of the shell-pink and sky-blue forms respectively among the scarlet type at Bromborough, Cheshire; and M. E. Gillham (1953, N.W. Nat. (N.S.), 1, 547) has reported a single blue specimen on Skokholm Island, Pembrokeshire, where both pink and scarlet forms are plentiful. Finally, V. C. Smith (verbal communication), after crossing

the blue and scarlet forms artificially, found that specimens with pale pink and bluish-white flowers appeared alongside the parents in the F_2 generation.

It has been shown by E. M. Marsden-Jones & F. E. Weiss (1938, *Proc. Linn. Soc.*, **150**, 146-154) that the five colour variants, scarlet, pink, white, purple and blue, form a series in which scarlet is simply dominant to pink, pink to white, and so on. Blue is simply recessive to all the others, except that when it is crossed with lilac there is a segregation in the F_1 . No mention, however, is made by these authors of the possibility of linkage, which the records cited above seem to suggest. Further genetical work on these colour variants is clearly needed.

Marquand (l.c.) remarks that in Guernsey 'the form with salmoncoloured flowers is frequent, especially near the sea; plants with pale pink or flesh-coloured flowers also occur, but less commonly'. Likewise, W. C. Barton (1916, Wats. B.E.C. Rep., 2, 544) records that among scarlet and pale-flowered plants growing at Barmouth, Merionethshire, a few specimens occurred with flowers intermediate in colour. The only other person to have reported two distinct pink variants appears to be H. W. Pugsley (1928, Wats. B.E.C. Rep., 3, 435), who distinguished a plant from Poole Harbour with pale pink corolla and bright crimson eye ('clearly bicoloured flowers') from the more frequent flesh-coloured form. Marsden-Jones & Weiss (l.c.) merely describe the corolla of their pink form as 'salmon or flesh', with a purple eye. This matter, too, deserves closer investigation.

It has been pointed out by F. Rilstone (1938, J. Bot.. 76, 85) that the flesh-coloured form is almost exclusively a maritime plant in Cornwall, where it occurs mainly on sand dunes in a form with a neater habit and subcrect stems. This dune form certainly has a very distinct facies, and as its characters appear to be constant it deserves a varietal name. However, while maritime populations (both of the suberect and straggling varieties) contain a large proportion, or even a predominance, of flesh-coloured plants in the Channel Isles, the Cornish Peninsula, the southern tip of Ireland and along the Welsh coast as far as Anglesey, the populations—at least of the subcrect dune variety—outside this region, in Lancashire, Dorset and Norfolk, for example, are evidently (apart from rare isolated instances) uniformly scarlet. The coincidence of flesh-coloured flowers and suberect stems, postulated by Rilstone, is, therefore, not complete. The reason for the prevalence of the fleshcoloured form in the milder, westerly coastal areas is obscure.-D. E. Allen.

517(2)/1. Salpichroa origanifolia (Lam.) Baillon, 1888, Hist. pl., 9, 288, fig. 363; Physalis origanifolia Lam., 1793, Tabl. encycl., 2, 28; Atropa origanifolia Desf., 1829, Cat. hort. Paris, ed. 3, 396; Busbeckia radicans Mart., 1829, Cat. hort. Monac., 69; Atropa rhomboidea Gillies & Hook., 1829, Hook. Bot. Misc., 1, 135-6, tab. 37; Salpichroa rhomboidea Miers, 1845, Hook. Lond. J. Bot., 4, 329.

A sprawling perennial, with rather woody, pubescent stems. Leaves with short hairs, or almost glabrous, small (1.5-2.5 \times 1-2 cm.), ovate-

rhomboid. Flowers small, > 1 cm., solitary, nodding; corolla urceolate, constricted at middle and at throat, with a ring of hairs above the insertion of the stamens within, white; calyx cleft almost to the base into five narrow, acute segments. Berries said to be white or yellowish and edible.

Baillon in making the combination gives no description and cites no authors' names but gives a figure of a section of the flower. This is accepted by Litardière (1948, *Candollea*, 11, 215) as validating the name. The same combination was made later by Thellung (1912, *Mém. Soc. Nat. Sc. Cherbourg*, Series 4, 38, 452).

This species has been found in Britain as follows:—S.; Guernsey; "found apparently wild", 1946, W. A. WARRY, (Hb. Kew); Shore at Grandes Rocques, 1950, J. E. LOUSLEY, (Hb. Lousley); Jersey; St. Ouen's, 1949, MISS TURNBULL, (Hb. Lousley): v.c 9, Dorset; Abbotsbury, opposite gardens in field, 1937, MRS. DAVIES, (Hb. Kew): v.c. 10, Wight; Ventnor-St. Lawrence, "among brambles and nettles by a dry stone wall", 1952, J. H. WALTER, (Hb. Mus. Brit.): v.c. 11, S. Hants.; Hayling Island beach, 1949 & 1951, MRS. D. WOFFENDEN, (Hb. Mus. Brit.).

Salpichroa origanifolia is a native of South America (Brazil, Uruguay, Paraguay and Argentina), and is grown for its edible berries, and as an exceedingly rapid climber. In California it has become a weed, and it is also naturalised in Florida. In Europe it is established in Corsica, and is on the way to becoming naturalised in the south of France. It appears also to be established in Portugal, and in Holland, near Rotterdam. In New Zealand it "occasionally escapes in North Island" (Allan, 1940: Handbook Naturalised Fl. N.Z., 299). In Britain it is said to be half-hardy but the records above suggest that it is likely to persist in competition with native plants in the Channel Islands and on the south coast.

In Paraguay, Argentina and France it is known as "cock's eggs". I am very much indebted to Mr. N. Y. Sandwith for assistance in compiling this note.—J. E. LOUSLEY.

 $691/2. \times 3$. Polygonatum \times hybridum Brügger, 1886, in Jahresb. Naturforsch. Ges. Graubünd., Neue Folge, 29, 160 (P. multiflorum \times odoratum); P. \times intermedium Bor., 1857, Fl. C. France, éd. 3, 2, 615, non Dum. (1827). 88, Mid Perth; Dunning burn adjacent to gardens, Dunning, 1953. Several plants of this garden hybrid mentioned in Clapham, Tutin & Warburg, Flora of the British Isles, 1220 (1952), were found growing amongst native vegetation and appeared to be well established. The flowers occurred in threes; the perianths, measuring up to 22 mm. were contracted in the middle, and the filaments were pubescent.—A. W. ROBSON.

†744/6. Cyperus esculentus L., 1753, Sp. Pl., 45. 34, W. Glos.; waste ground, St. Philip's Marsh, Bristol, I. W. Evans, in C. I. and N. Y. Sandwith, Bristol Botany in 1948, Proc. Bristol Nats. Soc., 27, 389 (1949).

†744/7. **C. rotundus** L., 1753, Sp. Pl., 45. 30, Beds.; Sundon Rubbish Dump, 1953, J. G. DONY and H. B. SOUSTER (J. G. DONY 2046, Herb. Mus. Brit., Herb. Kew, Herb. Luton Mus.).

Cyperus esculentus and C. rotundus, both sold commercially as tigernuts, are perennials. Superficially they resemble the British C. fuscus L., an annual; but they are taller, growing to 30 cm. Their spikelets are longer, in C. esculentus from 5 to 10 mm., and in C. rotundus from 15 to 30 mm. The glumes of C. esculentus are many-veined and strawcoloured with a narrow green keel; in C. rotundus they are three-veined and reddish-brown with a green keel.

Both species have a wide distribution in the Tropics, S. Asia and S. Europe.-J. G. DONY.

Specimens collected by Mr. A. W. Westrup and 758. Spartina. others during the excursion to West Wittering, W. Sussex, included some which, by the key in Clapham, Tutin and Warburg's Flora of the British Isles, ran down to Spartina maritima, yet were clearly not that species. They formed a patch among otherwise normal S. townsendii but were distinct in appearance on account of their small spikelets. In this gathering, the spikelets were shorter than 14 mm., and the anthers 6 mm. long, but the spikelets were short-hairy and the rachis was extended as a flexuous bristle beyond the spikelets; whereas in S. maritima the spikelets are densely hairy with long hairs, and the rachis is scarcely prolonged beyond the spikelets. The hairiness of the spikelets and the length of the rachis in the specimens in question was in favour of the assumption that they belonged to S. townsendii which has probably arisen from hybridisation between S. maritima and S. alterniflora. In S. alterniflora, the spikelets are glabrous and the rachis is prolonged in a flexuous bristle up to 3 cm. beyond the spikelets.-A. MELDERIS.

770/2. ALOPECUBUS ALPINUS Sm. The discovery of Alopecurus alpinus in Upper Teesdale adds another plant to the already extensive list of arctic-alpine species growing in that area. Also it adds another species to the list of English plants; all the other British records being from north of the Border.

The species was discovered in a collection of grasses made by the writer in Upper Teesdale in 1945 and identified recently by Mr. C. E. Hubbard. The plant was growing on sheep-cropped mounds of short, green turf in boggy ground near the Tees, at an altitude of about 1500 ft., on the Durham side of the river. It belongs to the awned variety of the species.—J. K. MORTON.

827/13(2). BROMUS CARINATUS Hook. & Arn. In September 1953 Mrs. B. Welch discovered a few tussocks of this alien grass growing on a rubbish-tip at Hanwell (v.c. 21). Dr. A. Melderis and I visited the area shortly afterwards and saw about eight tussocks growing over a small area of grassy waste land.

Bromus carinatus is abundant by the Thames in the vicinity of the Royal Botanic Gardens, Kew (v.c. 17), from whence it originally escaped. It was at Kew that the plant was shown to members of the Society at the start of the London Area excursion in September 1952. During the course of that excursion the rubbish-tip at Hanwell was visited, and it is possible that the seeds were accidentally introduced from Kew via the trouser turn-ups or shoes of a member, or members, of the Society.—D. H. KENT.

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