

BOTANY.

ART. VII.—*Floral* and Miscellaneous Calendar for Plainfield, Mass. 100 miles West of Boston, (Lat. supposed about 42° 30' N. and Lon. West from Lond. 73°—more than 100 miles from the ocean—country hilly and elevated,)*
by DR. JACOB PORTER.

Remark.—Floral Calendars, *very much in detail*, having been objected to by some persons, the editor has selected only what he supposed the author deemed the most interesting observations, from a calendar still more in detail.

It appears by this Journal, that in the course of five months, about twenty rainy days occurred, and in the same period there were fourteen cloudy and foggy days, but without rain. The notices of temperature, and weather being unaccompanied with any thermometrical observations, have been generally omitted, except where some connected circumstances rendered them interesting.—ED.

1819.—Jan. 24.—Common chickweed partly, and hair-cap moss fully blown.

Feb. 8. Before this date, the roads were settled and travelling good.

26. Heavy snow.

March, 17, 18. Snow in some places ten or twelve feet deep, and so hard as to bear men and animals.

April 2. The first blue-bird seen. In some places the snow is still above the tops of the fences, entirely concealing them. The farmers are now tapping their sugar-maple trees, which are very abundant here, and furnish the domestic supply of sugar; the tapping of the trees began before March 26.

3. Warm. The song of the robin heard for the first time.

7. Summer bird heard to sing.

11. The aments of the alder and poplar considerably swelled.

13. At sunrise a very large and beautiful rainbow. The ground is about two thirds bare, though in some places, the fences are entirely concealed by the snow. Several chirping birds are seen.

14. The first butterfly seen; the bees are also beginning to venture abroad and the song of the marsh quail has been

* The dates may be considered as being generally those that relate to the earliest events of the kind.

heard for a few days past. Making sugar is now the employment of our farmers.

15. So warm that we sat with open windows. The alder in blossom, its beautiful aments waving gracefully over the snow. The buds of the hazel are also tipped with red.

16. The three-lobed hepatica or liver leaf begins to show its buds.

17. A severe storm of rain, snow and hail, attended with some thunder and lightning.

21. The hazel and hepatica in blossom.

22. The croaking of the frogs is heard for the first time.

23. Found the clatonia or spring beauty in flower at Worthington. Some deep snow-banks still.

24. Sun eclipsed.

26. Farmers are now beginning to plough.

27. Roundleaved violet in blossom.

28. Woodpeckers and blackbirds appear.

29. Swamp willow in blossom.

May 1. So warm that an umbrella is agreeable. Erythronium or adders tongue in blossom.

2. Early corydalis or colic weed and two species of sedge in blossom; the trees are beginning to put forth their leaves, the chirping of the wren is heard, and the groves are full of music.

3. Lombardy poplar and Canada violet in blossom.

4. Observed the balm of gilead, red maple, yellow birch, rhomboidal trillium, sessile-leaved uvularia or bellwort, the delicate chrysosplenium or golden saxifrage and field equisetum in flower. The sun shines with a scorching heat, and vegetation is surprisingly rapid. Here and there however, a bank of snow is still to be seen on the hills.

5. Found the elm, fly, honeysuckle, colt's foot and strawberry in blossom at Cummington. The large poisonous leaves of the veratrum or poke root and the woolly heads of the polypods are starting up every where by our brooks. The first swallow seen.

6. The white birch, sugar maple, sweetscented white violet and bluish houstonia in flower at the same place. Very warm; the first chimney swallow seen. It is the season for sowing English grain. In the woods the leaves are not large enough to form much shade, but the long delicate aments of the yellow birch, waving over our head, appear

like the fringe of an umbrella. The herbaceous plants are flowering every where, and the petals of the roundleaved violet, in particular, resemble specks of gold scattered around the path.

8. Found the viburnum, the blue violet and the delicate three leaved panax in blossom. This beautiful species of panax is very abundant with us.

9. Found the beech tree and threleaved arum or indian turnip in flower.

12. The yellow violet and prostrate mitella in blossom. The first snake seen.

14. The currant bush and red berried elder in blossom.

17. The plumb tree and dentaria or tooth root in blossom. Plumb trees do not succeed well with us, many of them having large black excrescences on their limbs. Peach trees do not succeed at all; indeed, very few at present attempt to cultivate them. The root of the dentaria has a sharp spicy taste, not unlike that of horse radish. "Radices," says Michaux, "ab indigenis, loco sinapis, pro ciborum condimentis exsiccantur."

18. The wild red cherry tree, aronia or shad tree, cowslip and dandelion in blossom.

19. The small veronia or smooth speedwell and two species of granaphalium in flower.

20. The threleaved coptis or gold thread and dewberry in blossom.

21. Pleasant. Farmers are engaged in planting their potatoes and indian corn, which has been deferred till now on account of the late storm. The first yellow bird seen.

22. Warm and pleasant. Found the apple, peach and red cherry trees, the iron-wood, june-berry, and anemone, twoleaved mitella, painted trillium, wild gooseberry bush, caulophyllum, slender rush, two species of ranunculus and two of saxifrage in flower on the banks of Westfield river, Cummingtown.

23. Pleasant. The moose-wood wild currant and rose-flowered convallaria in blossom. The last is the rosy streptopus of Michaux.

24. Ash tree in flower. The bob of lincoln and king-bird, seen for the first time.

25. Shepherd's purse and common cerastium, or mouse ear chickweed in bloom.

26. Windy and cold ; in the morning a beautiful rainbow.

27. Dwarf cornel and hispid gaultheria in flower. The latter is sometimes used by the common people as a substitute for tea.

28. Clear and cold. This morning the ground is white with frost.

29. Frost this morning.

31. Our orchards are now in full bloom.

June 1. Large convallaria in flower.

2. Pleasant. Found the red oak, butternut, choke cherry, common ranunculus, clustered and umbelled convallaria, veratrum or poke root, water erysimum, trientalis, water cress and a beautiful species of gooseberry bush in flower, the most of them on the banks of Westfield river, Cummington. The delicate trientalis is the only native plant, that we have of the seventh class.

4. Visited the bog in Goshen, where I found the black chokeberry, the glaucous kalmia, the dwarf and rosemary leaved, andromedas, a species of eriophorum or cotton grass, the stemless cypripedium or lady's slipper, and two species of vaccinium in flower. To the botanist this is an interesting spot, and I would take the liberty of recommending it with emphasis to the attention of botanists. The pine, larch, mountain ash, sarracenia and many other very interesting trees, shrubs and herbaceous plants grow here. This bog is about three fourths of a mile east of Keith's Hill in Cummington. Observed the thorn bush and two-leaved convallaria in blossom by the road side.

5. Sarsaparilla in blossom.

6. The redberried actea or baneberry, medeola or indian cucumber, white clover and strawberry blite in flower. The white clover is the shamrock of the poets. The strawberry blite grows wild in this place. I have also observed it a few yards from the sulphur spring at Ballston Spa.

7. Very warm ; towards night a thunder shower. Black cherry tree, blueyed grass and common sorrel in blossom.

8. In riding to Northampton, I observed in flower at Goshen the yarrow, celandine, yellow oxalis, or upright wood, sorrel and raspberry bush ; at Williamsburg the locust tree, high blackberry and thimble berry, garden and wild columbine, red clover and common potentilla ; and at Northamp-

ton the barberry bush, two species of honeysuckle, one of them growing wild, two species of azalea or swamp pink, narrowleaved kalmia, spotted geranium, red top and foxtail grass, besides lilac, snow ball, rye and many other exotics.

9. Extremely warm; towards night a severe thunder storm. Common iris or blue flag in flower at the same place. The first fire fly seen.

10. The prunella, small ænothera and delicate krigia in flower at Northampton; longstalked smilax at Williamsburg.

12. In the morning, sharp thunder and lightning with torrents of rain; in the afternoon pleasant.

13. The white flowered oxalis or stemless wood sorrel in blossom.

14. Virginia hydrophyllum or burr flower in blossom.

15. Pleasant. Strawberries which are excellent and very abundant here, are now beginning to ripen.

16. Warm. Found the red cornel, golden senecia or ragwort and threeleaved convallaria in blossom at Cummington.

17. Mountain ash, Norway potentilla and common alsine or chickweed in blossom.

18. Another species of cotton grass and a very delicate species of spargula in bloom. In the afternoon a thunder storm with some hail; in the night, another tremendously severe, with large hailstones and torrents of rain; the hail in some parts of the town, so large as to break the glass.

19. Windy. Found the grape vine, broadleaved kalmia, purple sarracenia or meadow cups, common galium or cleavers, white weed, large veronica or marsh speedwell and circea or enchanter's night shade in blossom at Cummington. The fantastic sarracenia grows also at Goshen, Ashfield and Hawley. Doctor David Hunt also informed me that he has found at Northampton, numerous specimens of the sarracenia with yellow blossoms.

20. Very pleasant. The sanicle, small geranium and exquisitely beautiful and delicate linnea in flower. The last mentioned plant may be found on the margin of a small brook, about a mile east of the meeting house. I have also discovered it in the east part of Savoy, on each side of the county road leading from Plainfield to Adams. All the specimens that I have seen, are didynamous.

21. Pleasant; clouds uncommonly beautiful. Yellow water lily, potamogeton or floating pond weed, plantain, climbing polygonum and glechoma or ground ivy in blossom.

23. Common fleabane in blossom.

25. Found the broadleaved ledum or Labrador tea, three leaved menyanthes, common avens, craneberry and a handsome species of sedge in blossom, at the bog near Hawley meeting house, a most interesting spot. Observed the common cynaglossum or hound's tongue and the woody nightshade or bittersweet in flower by the road side.

26. False flax in blossom.

27. Some of our fields and pastures are now so completely covered with the blossoms of the common ranunculus, here called the yellow weed, as to have the appearance of being wrapt in sheets of gold.

28. False mustard in blossom.

29. Red and wild rose, mitchella and a species of panic grass in blossom.

30. Sage in blossom, and indian corn beginning to tassel. July 1. Lilyleaved malaxis in blossom.

2. Flax, motherwort, sow-thistle, mimulus or monkey flower and climbing celastus or saff tree in flower, the two last on the banks of Westfield river, Cummington.

3. Blackberried elder, bristly aralia, large ænothera, round leaved mallows and small flowered hypericum in blossom. In the evening a comet seen in the northwest.

4. Fair. Mullen, common asclepias or milk-weed, fringe flowered orchis and one-sided pyrola in blossom.

5. Frost this morning. Air uncommonly clear and weather very fine. Found the large flowered raspberry, common hypericum or johnswort, agrimony, Virginia or tall anemone, field thyme, two species of avens and two of galium or cleavers in blossom, on the south side of Deer Hill, Cummington. Spiked epilobium or willow herb and common nettle, also in blossom. The red raspberry is beginning to ripen.

7. Roundleaved orchis in blossom.

8. Roundleaved hypericum, Canada or narrowleaved hypericum and purple vervain in flower, and currants beginning to ripen. Farmers are beginning to cut their grass.

9. Very warm. Mustard, catmint, buckwheat, common

spargula or tangle weed, and the climbing red flowered bean in blossom ; the last attracts the humming bird.

12. Found the common sumach, white spirea, paniced andromeda, upright lysimachia, tuberous cymbidium, white nymphaea or fragrant water lily, adder's tongue, arethusa, comarum or marsh fivefinger, common typha and a handsome species of scutellaria or skull cap in flower, and junberries ripe at Goshen bog. The fragrant nymphaea grows also at Ashfield.

13. Weather very fine. Umbelled chimaphila, common stachys or hedge nettle, and knot grass in flower.

14. Wheat, cockle, spotted polygonum or heart's ease, common gnaphalium or life everlasting, and cud weed in blossom.

15. Cloudy. Potato in blossom.

16. Bass wood in blossom.

17. Maize in blossom.

18. Spikenard, ginseng, penthorum and coloured willow-herb in blossom.

20. Nettleleaved vervain in flower. The farmers are busily engaged in hay making.

21. Cloudy, the sun shining at intervals with a scorching heat. Found the clematis or virgin's bower, tansy, heartleaved lysimachia, hop, yellow nodding lily, impatiens or touch me not, and a delicate species of veronica in flower, the most of them in the meadows at Cummington. The hop grows wild at this place. The spring and summer have been, thus far, very favourable to vegetation ; indian corn and potatoes, very flourishing ; grass, not so good as usual, owing, probably, to the open winter ; peas, fit for the table. Crickets begin to chirp.

22. Very warm. Found the hydropeltis or water shield, cordate pontederia, sheathleaved dulichium or bog rush, roundleaved drosera or sundew, transparent eriocaulon or pipewort, and a species of prinus in flower at the Crooked Pond. During the latter part of the season, this is a very interesting place of resort to the botanist.

23. Weather the same. Wormwood, water pepper and pig weed in blossom. The first mentioned plant is naturalized and very common in this and the neighboring towns.

24. Found the common amaranth, elecampane, ampelopsis, sideflowering skull cap, one flowered monotrappa and

whorled eupatorium in blossom, the most of them at Cummington. The asters are also beginning to blossom.

26. Spear thistle in blossom.

31. Cucumbers fit for the table.

August 2. Whiteflowered cynoglossum, common eupatorium or thoroughwort and linearleaved epilabium in blossom. Notwithstanding the extreme heat of the summer, it is still very healthy; no prevailing disease.

4. Tall ambrosia or Roman wormwood in blossom, and high blackberries ripe.

6. Green corn fit for the table.

7. Intensely warm. There are at present some cases of dysentery among us.

8. The golden rods, of which we have several species, are beginning to blossom. I once used a tincture of the root of our most common species in brandy, as a tonic in my own case of spitting blood from the lungs, with very considerable benefit. The proper dose for an adult, is a table spoonful, two or three times a day.

9. Finger grass in blossom. Grasshoppers very abundant for two or three weeks past.

10. Warm and pleasant; clouds cumulous and very beautiful. Annual flea bane, burdock, chelone or snake head, wild sunflower, fennelleaved cicuta and two species of sagittaria in flower; all, except the two first, on the banks of Westfield river.

11. Potatoes fit for the table.

12. Currant bushes defoliating.

13. Found the downyleaved spirea, or hardhack, and longleaved drosera in blossom, and high blue whortleberries ripe at the crooked pond. Small berries or the common gaultheria.

18. Collinsonia, pennyroyal and common hieracium in flower at Cummington.

19. Simple sparganium in flower at Hawley. Farmers engaged in harvesting their wheat, rye and oats; crops very excellent.

23. Early apples ripe.

24. Very clear and pleasant. Some frost this morning on low grounds. Hemp in blossom.

27. Common tobacco in blossom.

28. Berries of the mountain ash turning red.

31. Visited the crooked pond. The leafless utricularia, water lobelia and floating villarsia or spur stem grow here in great plenty, but the growth of these interesting plants has been so much retarded this season, by the flowing of the pond, that they have not yet blossomed. The last year, I found them in flower the eighteenth of this month. The utricularia grows also at Ashfield and Hawley, the villarsia in a pond near the village of Sand Lake, New-York.

September 1. Common bidens in blossom.

2. Farmers cutting their stalks.

4. Beech drop and bladderfruited nicandra in blossom.

5. Indian corn ripening very fast.

6. Black cherries ripe.

9. Drooping neottia and largeflowered bidens in blossom, and common elder berries ripe. The leaves of our forests are beginning to assume the livery of autumn.

11. Farmers beginning to make their cyder.

15. Frost this morning. Clear, cold and windy.

16. Spearmint and witch hazel in blossom.

22. Leaves of the beech tree turning yellow and falling.

29. Maple and yellow birch defoliating; the leaves of the maple being, many of them, of a bright scarlet.

30. Artichoke in blossom. Farmers harvesting their corn;—crops abundant and very excellent.

1820.—March 19. The first woodpecker seen. Flies brisk and lively. The crust of the snow, owing to the late storms of hail and rain, is so very hard that a small dwelling house has been moved about a quarter of a mile upon it!

20. Farmers are beginning to tap their sugar maples.

23. Blue birds appear.

24. Robins appear.

29. In warm situations the aments of the alder are considerably swelled.

April 6. Buds of the willow considerably swelled.

7. A fall of snow.

11. Farmers busy in making sugar.

16. Found in warm woods the three-lobed hepatica in flower. The first butterfly seen. In many places the snow is still two or three feet deep.

18. Alder in bloom. The croaking of the frogs heard for the first time.

19. Poplar and claytonia in blossom.

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20. So warm that we sat with open windows. The round leaved violet in blossom. The first miller seen.

22. Red maple, swamp willow, and dog's tooth violet in blossom.

23. Martins arrived.

24. Wild strawberry, chrysosplenium or golden saxifrage, tuberous corydalis, and two species of sedge in blossom.

25. American elm, Lombardy poplar, and sessile leaved uvularia in flower.

26. The song of the wren heard for the first time. Dark purple trillium in flower.

29. Sugar maple in blossom.

30. Two leaved mitella and three leaved panax in flower. The month of April has been uncommonly warm and pleasant; and vegetation is remarkably forward, indeed, it is a common remark with us that it was never known to be so forward at this season of the year.

May 1. Fly honeysuckle in blossom.

2. Ash tree, and blue, Canada and yellow violets in blossom.

3. Currant bush in blossom.

4. Viburnum, sweet gale or Dutch myrtle, and sweet-scented white violet in flower.

5. Dandelion in blossom.

6. Yellow willow in blossom.

7. Indian turnip and wood anemone in flower.

8. Beech tree, shad tree and red-berried elder in flower.

9. Iron wood in flower.

10. Plum tree and heart leaved tiarella in flower. The buds of the mountain ash appear.

11. Pennsylvania saxifrage in blossom.

12. Apple tree, red cherry tree, and heart leaved epipactis in blossom. In the afternoon a copious thunder shower with some hail.

13. Thunder shower with hail.

14. Cowslip, chickweed, and smooth veronica in flower.

18. The first swallow seen. The three leaved coptis or gold thread, and bluish houstonia in flower. Farmers planting potatoes and Indian corn.

21. The first bob of lincoln seen.

22. Common cerastium or mouse ear chickweed in blossom.

23. Indian corn, that was planted very early, starting from the ground. Common ranunculus or yellow weed in blossom.

24. Caulophyllum, glaucous kalmia, painted trillium, and water cress in flower at Cummington. Our apple trees are now in full bloom.

26. A severe storm of rain and snow.

27. This forenoon the hills in Ashfield, Goshen and Windsor are white with snow.

28. Frost this morning. King birds appear.

29. Quince, wild columbine, golden smyrnium, and clammy azalea in flower at Conway.

June 3. Rosemary leaved andromeda, (see the figure on the plate) and small ænothera in flower at Goshen.

5. Grasshoppers appear. Black cherry tree, and white flowered oxalis in blossom.

7. Virginia hydrophyllum in flower.

8. Fire flies appear.

10. Red and white clover in flower.

12. Strawberries ripe, and green currants fit for the table.

14. Crickets begin to chirp. Upright wood sorrel, and golden senecio in flower.

15. Mountain ash in flower.

16. Norway potentilla in flower.

17. Prunella and Philadelphia fleabane in blossom.

21. Linnea and circea or enchanter's nightshade in flower.

23. Mullen in blossom.

24. Red rose in blossom.

26. Broad leaved kalmia in flower.

27. Onesided pyrola in flower.

28. Mitchella in flower, and red elder berries ripe.

30. Farmers beginning to mow. Wild rose, black berried elder and common asclepias in flower.

July 1. The weather for some time past has been extremely warm and dry. Round leaved pyrola in flower.

2. Common hypericum and fimbriate orchis in flower.

3. Red raspberries ripe. Spiked epilobium, large flowered raspberry, and transparent pipewort in blossom.

6. Virginia hypericum in flower.

7. Phytolacca or poke and umbelled chimaphila in blossom.

8. Farmers very busy in hay-making. Locusts begin to sing.

10. Elecampane, gay cypripedium, and inflated babelia in flower. Currants ripe.

12. Indian corn in blossom, and red garden cherries ripe.

13. Thimble berries ripe.

17. White flowered cynoglossum in flower.

18. Nettle leaved vervain in flower.

20. Green peas fit for the table.

22. Virginia demalis, common elymus, topseed, and a species of aster in flower at Cummingtown.

24. Button bush in flower.

26. Cucumbers fit for the table.

31. Spearmint in blossom. •

August 4. Burdock in blossom.

5. Downy neottia in blossom.

6. Common golden rod, and Virginian versia in blossom.

7. Rye fit for the sickle. Decurrent gnaphalium in flower.

8. White fringe flowered orchis and bulb, bearing cicuta in flower at the bog near Hawley meeting-house.

10. High blackberries ripe, and green corn fit for the table.

15. Potatoes fit for the table. Grasshoppers so abundant for some time past as to be very injurious to vegetables, particularly to grass and Indian corn.

22. Currant bushes defoliating.

24. Common gratiola in flower. Springs remarkably low. Many rocks in the North Pond, which I do not recollect ever to have seen before, appear above the water. On one of these we cut the figures 1820.

25. Berries of the mountain ash turning red.

26. Watermelons ripe.

29. Black elder berries ripe.

30. Black cherries ripe.

Errata in the Calendar, &c.

Page 275, date May 19, for *granaphalium* read *gnaphalium*.

" 278, " July 2, for *mimulus* read *mimulus*,