

Cheltenham War Economy Exhibition.

SOME USEFUL PLANTS.

Where to find Them.

How to Use Them.

Plants to Avoid.

A.—Plants suitable for eating raw : SALAD PLANTS.

1. **Garlic Hedge Mustard** (*Sisymbrium alliaria*).—This plant which is so abundant in hedges was in former times much used by country folk for eating with bread and butter or as a flavouring for sauces. It is also called Sauce Alone or Jack-by-the-Hedge.
2. **Water-Cress** (*Nasturtium officinale*).—It is hardly necessary to introduce this plant except to remind people that by eating fresh raw vegetables, substances good for health are retained, which are lost by boiling. An old herbalist says "the eating of Water-Cresses restores to their accustomed bloom the faded cheeks of sickly young ladies."
3. **Cress** (*Lepidium sativum*).—This plant, found often in waste places, is probably of garden origin.
4. **Salad Burnet** (*Poterium Sanguisorba*).—The leaves of this common plant have the taste and smell of cucumber.
5. **Wood Sorrel** (*Oxalis acetosella*).—This plant is abundant in our woods in early spring. The leaves have an agreeable acid taste, and are used in salads.
6. **Burdock** (*Arctium majus*).—The stalks are cut before the flowers open. They are peeled and eaten with oil and vinegar.
7. **Ox-eye Daisy** (*Chrysanthemum Leucocantherium*).—The young leaves of this common meadow plant may be used in salads.
8. **Dandelion** (*Taraxacum officinale*).—The flavour of these leaves is much improved if they are banked up with earth until they are blanched.
9. **Sow Thistle** (*Sonchus oleraceus*).—This plant, so often looked upon as a tiresome weed, has many uses. Its milky juice makes it a favourite with pigs, sheep and rabbits. It is given to poultry to make them lay more eggs. The leaves are used in salads in Germany but with us they are more often eaten boiled.
10. **Creeping Toadflax** (*Linaria cymbalaria*).—The leaves of this pretty little plant, growing in old walls, may be used in salads.
11. **Succory or Chicory** (*Cichorium intybus*).—This plant, which has beautiful blue flowers, is found by road sides and in waste places all over England. If the plants are earthed up, and treated like celery, or grown in a dim cellar the blanched leaves are a good salad. It can easily be cultivated in kitchen gardens.
12. **Common Sorrel** (*Rumex acetosa*).—Sowerby says that "in the markets of Paris sorrel is nearly as abundant during the season as peas are in London." How much use do we make of this plant so abundant in our meadows and pastures?
13. **Salsify** (*Tragopogon pratensis*).—This plant, as well as the more common yellow species (known as goat's beard or Jack-go-to-bed-at-noon), may have its roots eaten raw, boiled or stewed.
14. **Winter Cress** (*Barbarea vulgaris*).—This common plant is well worth cultivating in gardens as an early salad. It stands frost well, it is green and fresh in the depths of winter. In Sweden it is boiled and eaten like a cabbage.

B.—Plants suitable for Cooking : POT HERBS.

15. **Lesser Celandine** (*Ranunculus Ficaria*).—The young leaves of this plant are used as a green vegetable in some parts of Sweden. Several members of this, the buttercup family, may be used for food, but only after boiling, which destroys their injurious properties.
16. **Shepherd's Purse** (*Capsella Bursa-pastoris*).—This troublesome weed is specially cultivated in America as a pot-herb.
17. **Bladder Campion** (*Silene inflata*).—If the young shoots of this plant are gathered about two inches long, they may be used as a substitute for asparagus. The boiled leaves may be used as a vegetable.
18. **Common Chickweed** (*Stellaria media*).—This really delicious green vegetable is common throughout the world on waste and uncultivated spots. There is hardly a garden where it is not found. It grows, and grows rapidly, all the year. It is wholesome, nutritious, delicate, and with a spinach flavour. Yet, in this country it is hoed up and left to wither on the surface of the ground!
19. **Common Mallow** (*Malva Sylvestris*).—The boiled leaves of this common roadside plant form a wholesome vegetable.
20. **Rose-bay** (*Epilobium angustifolium*).—The flowers of this plant are well known as producing bright masses of colouring on the hills round Cheltenham. The young shoots may be used as a substitute for asparagus and the leaves boiled as a vegetable.
21. **Stinging Nettle** (*Urtica dioica*).—Those who have already proved what an excellent vegetable the young leaves prove, when treated in the same way as spinach, are advised to try earthing up plants to produce a vegetable like seakale. Dried leaves in hay give good fodder. Chopped leaves may be used with other food for poultry.
22. **White Goosefoot** (*Chenopodium album*).—A troublesome plant appearing and spreading rapidly in any neglected garden. It may be boiled and eaten.

23. **All good, or Good King Henry** (*Chenopodium Bonus Henricus*).—Unlike 22, which is an annual, this is a perennial plant worth cultivating. The leaves are green nearly all the year, they are wholesome and taste like spinach when boiled. Young shoots may be used as a substitute for asparagus.
24. **Hogweed, or Cow-parsnip** (*Heracleum sphondylium*).—This is a very common plant in meadows, pastures and hedges. The young leaves and shoots form a good green vegetable with an asparagus taste. Pigs fatten on the leaves.
25. **Charlock** (*Sinapsis arvensis*).—This is one of the most frequent and troublesome weeds on almost all soils, and especially of cornfields. It is boiled as a pot-herb in Sweden and Ireland.
26. **Cowslip** (*Primula officinalis*).—The leaves of this plant are wholesome and may be eaten raw or boiled.
27. **Solomon's Seal** (*Polygonum verticillatum*).—The young shoots when treated like asparagus are excellent. It is commonly used in Turkey.
28. **Sow Thistle**.—See No. 9.

C.—FODDER PLANTS.

29. **Clematis, or Traveller's Joy** (*Clematis vitalba*).—The leaves of this beautiful climber so common in the hedges may be used as fodder when dried, but contain an acrid juice when fresh.
30. **Corn Spurrey** (*Spergula arvensis*).—This common weed of light soils is grown on the continent for fodder. Seeds sown on corn stubbles provide food for sheep in winter; they are said to do better on it than on turnips. It is an excellent food for cattle and poultry. The seeds have oil which can be squeezed out of them; when bruised they do well for feeding cattle and in times of scarcity, they have even been made into bread.
31. **Greater Burnet** (*Sanguisorba officinalis*).—This plant found in damp meadows, is much cultivated as fodder in Germany.
32. **Lucerne** (*Medicago sativa*).—This plant has been cultivated for fodder since the middle of the 18th Century. It is specially useful in getting rid of weeds from a soil. It smothers other plants by its rapid growth. When it is cut, as is done several times in the summer, other weeds are cut too and their seeding prevented.
33. **Black Medick** (*Medicago lupulina*).—This very common plant of pastures and waste places is an excellent fodder for sheep.
34. **Red Clover** (*Trifolium pratense*).—This is perhaps the most important fodder plant. Its seeds, as also those of White Clover, have sometimes been used in flour for bread-making.
35. **White Clover** (*Trifolium repens*).—A widely distributed, quick growing and useful pasture plant.
36. **Hop Trefoil** (*Trifolium procumbens*).—A very satisfactory fodder plant, especially when sown with white clover.
37. **Bird's foot Trefoil, or Ladies' Slipper** (*Lotus corniculatus*).—This pretty little plant so common in meadows and on downs, improves hay and gives good fodder.
38. **Sainfoin** (*Onobrychis sativa*).—This much cultivated fodder plant does best on chalky soils. Its culture helps to suppress weeds as explained for No. 32.
39. **Tufted Vetch** (*Vicia cracca*).—One of the greatest ornaments of our hedgerows. It is a good cattle food.
40. **Bush Vetch** (*Vicia sepium*).—This plant shoots earlier in the year than any other plant eaten by cows. It is very common in hedges and woods.
41. **Common Tare** (*Vicia sativa*).—An excellent fodder plant which has been cultivated from very early times. Sometimes it is cultivated for the sake of its seeds which are very nutritious and are used for feeding pigeons and poultry.
42. **Gorse or Furze** (*Ulex Europæus*).—This very common plant is useful for many purposes. Though it does not appear to be a tempting food for animals, it may be rendered so by crushing it in a mill, when cattle and horses will eat it, and on grinding it finely sheep like it. It is often burnt to improve the ground. Cattle like the young shoots which spring up readily afterwards. When burnt, the ashes are rich in materials which mixed with clay form a substitute for soap.
43. **Comfrey** (*Symphytum officinale*).—A plant very common in most places. Gives excellent fodder for cows.
44. **Sow Thistle**.—See No. 9.
45. **Ribwort Plantain** (*Plantago lanceolata*).—Very abundant in meadows, pasture and waste places; a good fodder plant.

D.—SUBSTITUTES.

FOR SOAP—

46. **Soap wort or Fuller's Herb** (*Saponaria officinalis*).—When boiled or bruised in water the leaves produce a lather which removes grease. It is specially good when the water is hard.
47. **Gorse**.—See No. 42.

FOR STARCH—

48. **Ribwort Plantain**—See No. 45. When the seeds of this plant are put into hot water a gelatinous substance comes off them, which can be used for stiffening some kinds of muslins.

FOR COFFEE—

49. **Broom** (*Sarothamnus scoparius*).—The seeds when roasted and ground form a coffee substitute.
50. **Goosegrass** (*Galium aparine*).—This plant also known as "cleavers" is very common in hedges and on waste ground. Its seeds may be used as a substitute for coffee.
51. **Chicory or Succory**—See No. 11. The roots are used to adulterate coffee.
52. **Dandelion**.—See No. 8. In Germany the roots are cut up, roasted and used in place of coffee.

FOR TEA—

53. **Ground Ivy** (*Nepeta glechoma*).—This plant with its violet coloured flowers is very common in hedges and woods in spring. An infusion of the leaves is sometimes used by country people as a substitute for tea. It is also used medicinally.

54. **Lime** (*Tilia Intermedia*).—Pliny calls this "the tree of a thousand uses." A tea made from the blossoms is very commonly used in France as a beverage. It is useful for sleeplessness. The foliage is eaten by cattle either green or dried. Lime honey is excellent. The wood is valuable. The sap en spring, if tapped, gives sugar.

FOR SUGAR—

55. **Sycamore** (*Acer pseudoplatanus*).—The sap contains much sugar. When the wood is burnt it forms the best charcoal, the leaves cut and dried for forage for sheep in winter.

56. **Maple** (*Acer campestre*).—The sap contains sugar. Unfortunately our species is poor in this respect as compared with the species of the New World.

FOR OIL—

57. **Corn Spurrey**.—See No. 30.

58. **Dogwood** (*Cornus sanguinea*).—This shrub is a very common feature of our hedges. In France oil is extracted from the berries; it is used for burning or soap making.

59. **Elder**.—See No. 84. Oil is made from distilling the flowers.

60. **Common Yew** (*Taxus baccata*).—Oil may be extracted from the seeds.

61. **Beech** (*Fagus sylvatica*).—In France an oil made from the seeds is used either for burning or cooking.

FOR BREAD—

62. **Dropwort** (*Spiraea Filipendula*).—This plant gets its name from its curious thickened roots which hang on by slender threads. These roots can be dried, powdered, and made into bread.

63. **Ladies' Mantle** (*Alchemilla vulgaris*).—The roots of this plant, when boiled or roasted, are edible. We are told that the inhabitants of the Hebrides existed on it for months in a time of scarcity. It was used as a medicinal plant and it was claimed for it that it had "the power of restoring feminine beauty, however faded, to its earliest freshness."

64. **White Beam** (*Pyrus Aria*).—This tree which is readily recognised by the soft white covering of the lower surface of the leaves, bears red berries. These dried and powdered have been used as bread in times of scarcity. Numbers of White Beams occur in the local woods.

65. **Mountain Ash or Rowan** (*Pyrus Aucuparia*).—The dried berries may be ground to make flour.

66. **Sweet Chestnut** (*Castanea vulgaris*).—The nuts boiled or roasted are a substitute for potatoes. Bread may be made of the flour.

67. **Early Purple Orchis** (*Orchis mascula*).—This orchid is the first to flower in our woods and meadows. The tubers of this and of the green winged orchis contain a kind of starch known as "salep." This is said to be very nourishing. Sowerby says that an ounce of this substance a day is known to have sustained a man for nearly a week.

FOR RENNIN—

68. **Yellow Bedstraw** (*Galium verum*).—The flowers of this plant, so common on banks and in pastures, can be used in place of rennet.

FOR PAPER-MAKING—

69. **Common Mallow**.—See No. 19. In France paper is made from mallow fibre.

70. **Broom**.—See No. 49. The fibres of this plant can be used for making cloth and also paper. The twigs are used for thatching.

E.—POULTRY FOODS.

71. **Chickweed**.—See No. 18.

73. **Common Tare**.—See No. 41.

72. **Corn Spurrey**.—See No. 30.

74. **Sow Thistle**.—See No. 9.

75. **Climbing Buckwheat** (*Polygonum convolvulus*).—The seeds of this common cornfield weed are nutritious and good for poultry.

76. **Stinging Nettle**.—See No. 21.

F.—MEDICINAL PLANTS.

*Poisonous. †Plants which can be collected for various Herb Growing Associations. Particulars as to the plants in demand and the best methods of collecting may be obtained from "The National Herb-Growing Association" 15, Verulam Street, Gray's Inn Road, London, E.C.1. The collection is a helpful and useful work for school children; it is not worth while sending small quantities.

†77. **Yarrow** (*Achillea millefolium*).—This is very common in grass. The whole plant should be cut to the root.

†78. **Agrimony** (*Agrimonia eupatoria*).—Found on waste places. When in flower the plant should be cut down to the root.

†79. **Valerian** (*Valeriana officinalis*).—The root of this plant is used.

*†80. **Foxglove** (*Digitalis purpurea*).—Abundant in many parts but does not like limestone. A valuable drug is produced from the dried leaves. The best time to collect the leaves is just before the flowers come out. They should be as perfect as possible and spread out flat.

†81. **Buckbean** (*Menyanthes triolita*).—This plant likes peaty bogs. It is used as a tonic.

*†82. **Henbane** (*Hyoscyamus niger*).—This plant is easily recognised by its sticky hairs and grows chiefly in waste places.

†83. **Comfrey** (*Symphytum officinale*).—See No. 43. The leaves should be treated in the same way as those of No. 80.

- †84. **Elder** (*Sambucus nigra*).—See No. 59. The leaves are wanted for medicinal purposes.
- *†85. **Woody Nightshade** (*Solanum Dulcamara*).—This plant, which is common in hedges, must not be confused with No. 86. The stems are collected and dried. The scarlet berries are very poisonous.
- *†86. **Deadly Nightshade** (*Atropa Belladonna*).—This most valuable medicinal plant grows in the neighbourhood. It should never be gathered except for medicinal purposes and in no case uprooted, as it takes some years to become established. Some old and young leaves should be left on the plant.
- *†87. **Couch grass** (*Agropyrum repens*).—This troublesome weed is used medicinally. The cleaned, dried rooting part is used.
- †88. **Wood-ruff** (*Asperula odorata*).—This common woodland plant is best collected when in flower. It is cut at the level of the ground.
- *†89. **Meadow Saffron or Autumn Crocus** (*Colchium autumnale*).—The underground parts and seeds are used medicinally.
- *90. **Black Bryony** (*Tamus communis*).—This beautiful climber is a great ornament to our hedges in summer on account of its shiny leaves, which turn later a deep purple. When these fall, wreaths of scarlet berries are left.
- *91. **Monkshood** (*Aconitum Napellus*).—This plant contains a very powerful poison. It is used to allay pain.
92. **Barberry** (*Berberis vulgaris*).—Fairly common in thickets and hedges.
- *†93. **Greater Celandine** (*Chelidonium Majus*).—Common in hedges, especially near the town. The whole plant down to the level of the root is useful.
94. **Fumitory** (*Fumaria officinalis*).—This very common weed of waste places and cornfields was at one time a favourite remedy for skin diseases.
95. **Hedge Mustard** (*Sisymbrium officinale*).—The whole of this very common, uninteresting looking plant has been used medicinally.
- †96. **Meadow Sweet** (*Spiraea ulmaria*).—Meadow Sweet which grows so commonly in ditches and waste places may be collected and tied into bundles and dried. It is used for perfume.
- †97. **Broom**.—See No. 49. Broom "tops" in full flower are used in medicine.
- *†98. **Poppy** (*Papaver rhoeas*).—A syrup made from fresh poppy petals is used for colouring medicines.
- †99. **Raspberry leaves** are sometimes wanted medicinally.
100. **Biting Stonecrop** (*Sedum acre*).—This plant is common in dry situations.
- †101. **Coltsfoot** (*Tussilago Farfara*).—Railway banks and waste places are covered with the bright yellow flowers of this plant quite early in the spring. The leaves which come up later are wanted.
102. **Dandelion**.—See No. 8. Roots of this plant should be gathered from October to March and dried until they are brittle. They should be white inside.
- †103. **Mullein** (*Verbascum Thapsus*).—The leaves should be treated as for No. 80.
- †104. **Horsetail** (*Equisetum*).—This troublesome weed is sometimes wanted for medicinal purposes.
- †105. **Wood Sage** (*Tencrium scorodonia*).—This is abundant in woods and hedges; it may be cut down to the root.
- †106. **Male Fern** (*Aspidium*).—Used in medicine.
- †107. **Burdock**.—See No. 6. The roots of this plant are used.
- †108. **Goose-grass or Cleavers**.—See No. 50. This plant is cut off at the level of the ground.

G.—POISONOUS PLANTS.

109. **Yew** (*Taxus communis*).—The whole plant except the berries is poisonous.
110. **Mistletoe** (*Viscum album*).—Though the berries are poisonous, the rest of the plant has been sometimes powdered and mixed with rye to form bread in Prussia. Before we grew so many turnips this plant was given to sheep in cold weather.
111. **Spurge** (*Euphorbia*).—Many species are common weeds, their milky juice is poisonous.
112. **Marsh Marigold** (*Caltha palustris*).
113. **Pasque Flower** (*Anemone pulsatilla*).
114. **Wood Anemone** (*Anemone nemorosa*).
115. **Hellibore** (*Helleborus*).
116. **Spindle-tree** (*Euonymus*).
117. **Ivy** (*Hedera Helix*).
118. **Corn Cockle** (*Lychnis Galthago*).
119. **White Bryony** (*Bryonia dioica*).
120. **Wild Arum or Lords and Ladies** (*Arum maculatum*).—The scarlet berries are very poisonous but the underground parts are quite nutritious when freed from acid.
121. **Herb Paris** (*Paris quadrifolia*).
122. **Lily of the Valley** (*Convallaria majalis*).
123. **Buckthorn** (*Rhamnus catharticus*).—This medicinal plant is found sometimes in hedges.
124. **Fool's Parsley** (*Aethusa cynapium*).—The foliage of this very common garden weed has been mistaken for parsley and the roots for carrots.
125. **Hound's Tongue** (*Cynoglossum officinale*).—This somewhat uncommon plant grows on the neighbouring hills.

This exhibit is an attempt to bring into public notice some of our wild plants, many of which, though looked upon as tiresome weeds, may be made to serve useful purposes. Some of these in times of plenty may hardly have merited attention; but in times of dearth it becomes the duty of every citizen to see that nothing that may be of use to the common weal is wasted. Many of the plants here exhibited, though neglected by ourselves, have been commonly used by our more thrifty Continental neighbours—friends and foes alike. Short notes are given which may be helpful as indicating where the plants grow and how they may best be utilised. No section pretends to give a complete list of the plants which can be used for the specified purpose. A collection of poisonous plants is also shown.