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TO LOVERS OF BEAUTIFUL TURF

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PURSLANE

Other names: Pussley, Wild Poertulaca, Duckweed, Pursley Annual.

Propagates from seeds.

Time of bloom: Late June until frost. Seed time: July until killed by frost. Range: Throughout North America. Habitat: Lawns, cultivated ground and waste places.

This has been a banner year for Purslane. We have received more specimens Purslane have been known to live in the soil for thirty years. Years ago W. J. Beal, then botanist of the Michigan Experiment Station, discovered this when experimenting with buried seeds. It was also established that the seeds of this particular weed germinate only when near the surface of warm soils. The excessive heat waves of the past summer might therefore readily account for Purslane prevalence.

When new lawns are built it often



PURSLANE, Portulacea oleracea.

of it for identification within the past few months than were received during the last three years. The unusualness of this fact becomes less mysterious when we look into the habits and peculiarities of the weed. First of all, the seeds of happens that weed seeds of various kinds are deeply buried in the soil, especially if the top soil is covered up in excavating and sub-soil thrown on top. In later years the lawn may be re-made and when the ground is turned over such weed seeds as Purslane still possessing the spark of life, are brought near the surface and during a period of hot weather, they germinate.

How to Identify

Without the use of color our illustration does not make the weed as readily recognizable as if the reddish stem and yellow flowers were reproduced. The fleshy stem which is often more pinkish than red, is smooth and contains a milkylike substance. The weed has a central root from which the stems branch out freely resulting in a matted growth. The leaves are wedge shaped and cluster at the end of the branches. Small solitary yellow flowers which open only on sunny mornings are at the center of each leaf cluster.

The fruit or seed capsule is urn-shaped and opens transversely with the top falling off like a lid. When near maturity the plant can hardly be touched without sowing the ripened seeds by the hundreds. Purslane is most tenacious of life, often re-establishing itself after being badly battered and partially destroyed. The fleshy stems and leaves sustain the life of the plant while it is becoming reestablished in the soil. It is for that reason extreme care must be exercised in disposing of the plants after they have been taken out of the lawn.

Means of Control. A general statement is given by most authorities on this subject which is simply this: hand pull or hoe out the plants before they reach the stage of maturity. When the seed cones have formed the damage will already have been done. One authority believes that Iron Sulfate will kill Purslane, but most observers believe it best to rely upon removing the plant from the soil. Further evidence that this has been a Purslane year and to present a further means of control we quote as follows from H. B. Musser of the Depart-

ment of Agronomy at the Pennsylvania State College:

"It seems the weather conditions here in central and northern Pennsylvania have been ideal for the germination and growth of Purslane this summer. It is not much affected by drouth conditions that have checked the growth of grass and other weeds which might have crowded it during its seedling stage. I have found a very effective method of keeping it under control in new lawn seedings is to rake it up thoroughly before each clipping with a short, sharp tooth rake. I use a rake the teeth of which are just about one inch long and one inch apart. This is sufficient to catch the stems of Purslane but does not tear up the grass. While this treatment will not kill the weed, yet it discourages it to such an extent that it will not crowd out the grass. I know of no other treatment for its control except hand pulling. Of course the first frost will kill it."

We shall be interested in knowing to what extent Purslane has been discovered in your lawn this summer and how, if at all, you have been successful in getting rid of it.

Twelve-Year-Old is Struck by Lawn Care

THE above is not a figure of speech but the very thing which happened to Bayard Wilson of Rising Lane Farm, Metamora, Michigan. Bayard wrote for a set of LAWN CARE bulletins and here's why:

"I don't want you to be fooled so I am going to tell you that I am only twelve years old although my brother (15) and I look after about two acres of lawn and weeds. We have lots of problems and in looking for a guide I was struck by a new idea—the LAWN CARE book of my father's fell off a tall, thin

bookcase I was cleaning and hit me on the head. As my father's set wasn't complete I decided to have one of my own. Please let me know about the book."

THE PROBLEMS OF SHADED LAWNS

PART IV

A T THE time this present series of articles on the shade problem was started it was planned to conclude them in this issue with a summary of specific recommendations. Since that time the terrifically hot weather has brought forth other problems that seemed more timely for consideration in this issue. The shade problem will be renewed and concluded in an early issue of 1935.

Those who have shaded lawns to battle generally think theirs is the worst burden. True enough, the growing of grass in such conditions is quite a problem, but there are certain compensations. For one thing, very few weeds will grow in the shade; crab grass not at all, and dandelions to only a limited extent. Then, too, shaded lawns are favored by being protected from the ravages of the burning sun that destroyed so much turf in open places during the past summer. In contrast to the usual conditions shaded lawns came through the summer in much better condition than ordinary lawns.

One reader of LAWN CARE brought us an interesting problem regarding treatment of a lawn area around a tree. As this particular place in his yard received a lot of wear he was considering putting down a flagstone terrace on the area with grass between the stones and wondered if this would be injurious to the tree. We immediately took up this problem with The Davey Tree Expert Company who replied as follows:

"We see no objection to the method of treatment of the shaded place brought

up by your correspondent. This would certainly be preferable to an all concrete covering over the surface of the soil occupying the tree roots.

"The crevices between the stones should be fairly effective in allowing for entrance of air and water to the tree roots and would also permit of the application of fertilizers to the tree roots by some modification of the perforation system which we recommend. From the standpoint of the tree, it would probably not be any more harmful than a heavy covering of grass."

Some other interesting letters have been received since we inaugurated the shade articles. Here is one from an experienced authority, Mr. John C. Ryan, Superintendent of St. Mary's Catholic Cemetery Association of Appleton, Wisconsin:

"I was much interested in the article in your last issue of LAWN CARE, in regard to growing grass under trees.

"With us, the only problem we have is growing it under evergreens. Nobody can grow grass under evergreens that grow close to the ground. Up to the time an evergreen reaches 10 or 12 feet in height, it should be kept cultivated as far out as the branches reach, and therefore, up to that time, you have no grass problem.

"My rule has always been, never to trim an evergreen of its lower branches until forced to do it. A beautiful evergreen is one that has its branches complete, from the ground up to the tip, regardless of the height. But when the time comes that you have to do trimming, don't do it all at once. Begin by trimming out several rounds of the lower limbs, and let it rest for a season, then take a few more. In fact, trim no more off the bottom in any one season than the distance the new tips will grow on the top. This prevents them from looking like a bush on the end of a pole. We reseed with your shady grass seed each year, and keep grass growing right up to the trunk on most of them.

"All evergreens will shed a lot of needles each year, and you can not grow grass in a bed of these. So, we always remove every trace of the needles each spring with a spring tooth rake or sometimes a dandelion rake will do better work. Then we top dress the bare spots, using plenty of fertilizer, and sow with the shady lawn mixture. This is work for almost every season, but the results are worth it. We have had no trouble in growing grass under any of our trees but the evergreens and not much under these after they have been trimmed up to five feet from the ground. We find that your shady mixture, plus top dressing, does the trick."

Then, here is a man who thinks it is easy to grow grass in the shade if he has a light sandy soil with which to work. This is in line with our previous discussion of the importance of the mechanical soil condition. As pointed out then it is better to have a soil will not "puddle." Clay soils will, but sandy soils will not. This letter is from Mr. Ernest Mansfield, 1734 Ashland Ave., Evanston, Illinois:

"Growing a lawn in the shade—I would like to give my opinion. Being in this line of business for many years, my experience is that it is fairly easy to raise a lawn in the shade in sandy soil, but very hard in soil which is mostly heavy or even clay. The use of shady grass seed only will not make a permanent lawn. Where there is shade and sandy soil the top soil should be well fertilized every spring and fall, plenty of perennial grass seed put in with a heavy mixture of Chewings Fescue.

"Very important is, not much watering and especially not to cut the grass too closely during the summer months. Where there is heavy soil and lots of trees, etc., the best way is to put a heavy layer of sand or gravel under the surface. There surely will be good results if the surface consists of only two or three inches of good well fertilized light top soil; and, remember, not much watering during the summer, possibly once a week will be plenty."

From our experience we are not so sure that three inches of topsoil over a layer of sand or gravel would be sufficient. It seems to us that a minimum of six inches should be provided. Otherwise there would hardly be enough of a moisture and food retaining layer.

(To be continued.)

How to Kill Toadstools

"Soak the ground thorougly with Sulfate of Copper or Bordeaux Mixture. This will kill the fungus.

"Another method is to loosen the soil and apply an Iron Sulfate solution, one pound in 1½ gallons of water. Bordeaux Mixture is preferred as it does little or no damage to the grass."—U. S. Golf Association Bulletin.

Previous Issues of Lawn Care

There have been thirty-one previous issues of Lawn Care and the following lawn pests have been discussed: Plantain, Crab Grass, Dandelions, Moss, Grubs and Beetles, Chickweed, Buckhorn, Ground Ivy, Yarrow, Earthworms, Healall, Ants, Speedwell, Creeping Buttercup, Sod Web-Worms, Moles, Knot-Grass, Sorrel, Quack-Grass, Spotted Spurge, Yellow Trefoil, Goose Grass, Nimble Will, Knawell, Shepherd's Purse, Chinch Bugs, Sedge, Terraces, and the Shade Problem. For the complete series please allow 10 cents to cover mailing costs.

For \$1 postage paid you may secure a ring binder containing a full set of bulletins and with adequate capacity for issues of the next five years.