

"PROPAGATING SCUPPERNONG GRAPES."

Prof. Massey Replies to Jack Johnson—
Roots are Always the Product of
Stems.

Editor of The Progressive Farmer:

I have just noticed the article in your columns signed "Jack Johnson." I suppose this is a nom de plume, and that the writer was ashamed to sign his name to such nonsense. It is hardly worth while to discuss these matters with one who supposes that crossing of varieties is made by grafting or budding. If this was true all of the nursery-grown apple trees would be crabs, for they are all grafted on seedling crab apple roots. Cross breeding in plants is only done by crossing the flowers of one species on another which will be what is called hybridizing, or crossing flowers of different varieties of the same species on those of another variety and growing from the seed thus produced new plants having partially the characters of each parent.

I would inform Mr. Johnson that roots are always the product of stems, and that whatever root the plant is grafted on, the subsequent growth is always whatever the top is, for the material growth is always elaborated by the leaves. A piece of wild Bullace root will enable the Scuppernong vine to make a larger growth in one season than it would without it, but all the roots formed thereafter will be true Scuppernong roots just as the top is, for the sap water that comes from the ground must be elaborated by the Scuppernong foliage and the top and root will then be Scuppernong and nothing else. We commonly bud plums on peach roots, and if Mr. Johnson's ideas were true we would have them half peach and half plum, while we know that we get the same variety of plum every time. I can show him hundreds of Scuppernong vines bearing the purest of Scuppernong grapes which were grafted on Bullace roots.

Mr. Johnson says that in his way of planting few of the cuttings will live. He is certainly not a good hand at handling cuttings. Let him take off the cuttings late in the fall and tie them in bunches and bury them in the earth upside down till spring. Then set them in the proper position and see how many more will root. But if he takes pieces of the Bullace roots about four inches long and makes a split in the middle of the root and through this inserts the end of the cutting after trimming it wedge-shaped and then set it, not one in a hundred will fail, but will make as large plants in one season as the cutting without the root will in two. Mr. Allen Warren of Greenville, Pitt County, originated this plan, and Mr. Johnson can see there a vineyard of Scuppernongs and others of the same Vulpina class bearing the same variety that was grafted on them.

I would advise Mr. Johnson to study plant life a little and know what he is talking about before he

undertakes to correct one who has made a long life study of these things. The root of a plant used for a stock is simply something to aid the scion in its first growth, and afterwards the stem makes its own roots, for all material to form roots must come from the leaves above, which are the laboratory of the plant for manufacturing material for growth both above and beneath the ground. We have one apple now grown which for over one thousand years or more, or from the time of the old Romans, has been grafted on crab apple roots in Europe and in this country and it is the same apple to-day that it was when the old Romans grew it along the Appian Way. According to Mr. Johnson it would by this time be nothing but a crab for uncounted millions of the Lady Apple, the highest-priced apple on our markets to-day, have been grafted on crab apple roots.

W. F. MASSEY.

Wake Co., N. C.

One Need of the South.

Editor Gilbert M. Tucker, of the Albany (N. Y.) Country Gentleman, writing of his recent trip South, says:

"Another crying need of the South—by no means peculiar to the South, but specially, even appallingly, apparent on the lines followed by the Farmers' Congress visitors—is attention to forestry. The present vandalism is perfectly horrible. You see from car windows, hour after hour, hundreds and hundreds of pine trees 'boxed' for turpentine in a fashion very unnecessarily destructive to the trees, but a little quicker and easier than the more rational method. You stand in any one of scores of large sawmills and watch the great tree trunks coming in on a belt carrier in rapid and endless succession, tumbling right and left alternately to whirling saws which reduce them to boards in a twinkling; and the rapid disappearance of the forests grows in the mind into a prophecy of coming evil that should frighten the people of Georgia and Florida into taking some effective action before it is too late—especially as forest growth is, for many reasons, of inestimable value, agriculturally as well as commercially, in these States. Talk about killing the goose that laid the golden eggs! These lumbermen and turpentiners are straining every nerve to annihilate the very breed."

The November Everybody's prints David Graham Phillips' estimate of the Democratic boss of New York, David B. Hill, which will be read with interest at this juncture. In a broad way Mr. Phillips deals with Hill's career and details his strong and weak characteristics. He makes the point that while all the other distinguished American politicians have two sides,—the public and private side,—Mr. Hill has but one. Politics are sweetheart, wife and children to him.

MISUNDERSTANDING CONCERNING VALUE OF ARTICHOKE.

Something About Their Value as a Feeding Crop—How to Grow Them.

Editor of The Progressive Farmer:

According to the writer's long experience in growing and handling artichokes, the most serious mistake is to grow them on same land more than two years in succession. They need changing the same as do other crops. Many seed dealers who offer artichoke tubers for sale say that only one planting is needed; that the artichoke being perennial will reproduce itself year after year without the trouble of replanting or cultivation. True enough. So will most other crops grow volunteer, but what do they amount to? Artichokes when permitted to sprout up and grow without cultivation, always grow so thickly together that they form an overabundance of tops, with but few and small tubers. In this condition they can be likened unto a sowed field of corn, which furnishes an abundance of fodder, but very little grain.

To secure a large yield of tubers (and that is the main object in growing them), they should be planted and cultivated every year, same as potatoes, and it pays big to do so, when the large yield of tubers is considered.

As freezing and thawing, while in the ground, does not in the least injure the tubers of artichokes, it is much the better plan to plant them in October or November. The writer cuts the largest tubers to about six times the size of a quail egg and plants them in three and one-half foot rows, with the tubers drilled about 18 inches apart, and covered with two or three inches of soil. They will then be in the ground to get an early start in the spring, and through the means of an early start, will grow a strong stalk before the cut worm season begins. While if the planting be delayed until spring, the ground is often too wet to plow until late, and the cut worms often greatly injure the young plants before they get a good start, and in reality often make the difference between a good crop and a failure.

A wealthy hog raiser of the writer's acquaintance, and who has made a very valuable farm by raising hogs for the pork market, says that he would not be without a large annual patch of tame artichokes, and that his herds have been entirely free from hog diseases since they have been allowed to root to their hearts content in an artichoke patch.

There is no doubt that very much of the mortality among hogs is directly due to indigestion caused by an exclusive corn diet. Every wide-awake hog raiser will admit that growing pigs and fattening hogs do very much better and make a much better quality of bacon, when they have been fed on a mixed diet. Grass, shorts, pea meal, cow peas, sugar beets, mangel wurzels, etc., are all good healthy hog and stock feed. But artichokes are much the cheaper, when the very large yield of tubers is considered. The foliage of arti-

chokes is also very greedily eaten by horses, cattle, and sheep.

Artichoke tubers are an excellent food for all kinds of stock and poultry, and their great value as conditioners is fast becoming recognized. They are a splendid milk producing food for cows during late autumn and early spring, when green grass is scarce. The writer feeds artichoke tubers to his horses (all stock must learn to eat them) in connection with sunflower seed, oats and corn, from October to June. His horses prefer the tubers to corn, or even oats. They help form a change of feed, clean the worms out of them, and keep them healthy, sleek and fat.

Artichokes should never be grown on swampy land, if a good yield of tubers is desired. Well drained land under-laid with gravel near the surface is the ideal land for them, although they do well on any good corn land.

The Mammoth White French, White Jerusalem, and Red Jerusalem varieties, are the best for general cultivation. They do well in every State. Seed tubers can be obtained from almost all reliable seedsmen.

There is a long-standing prejudice with many farmers against the cultivation of the artichoke, and indeed many have good reasons for prejudice. As there are wild and tame rye, wild and tame lettuce, wild and tame parsnips, etc., so there are wild and tame artichokes. Almost every vegetable and cereal cultivated and used as food for man or beast, has its namesake in a noxious, and oft-times troublesome weed. The wild artichoke is merely a bad weed, producing very few, small and tough in-nutritious tubers, and is about as hard to exterminate as is the Canada thistle. The tame artichoke may be very easily eradicated by sowing the patch to oats, or plowing under the growing plants when about two feet high. Why, "it's as easy as rolling off a log."

J. C. SUFFERN.

Piatt Co., Ill.

Ditching, Drainage, and Some Other Kindred Matters.

Editor of The Progressive Farmer:

It is better to prevent lands from washing into gullies, but if such is the case they should be stopped by throwing pine brush, (top upward), shavings, or cornstalks into them, and if Bermuda-grass is already on the place, throw some of that in also. If trees are wanted, drop walnuts, hickory-nuts, pecans, or other seeds among the trash.

All mountain or hillsides should be kept in timber, grass, or small grain if possible, and every tillable acre should represent a great sponge, capable of holding a quantity of water, and returning it when needed. Lowlands with clay subsoil, and springs near by or under hillsides (if good water preserve the springs for use) require ditching three feet deep, and tiles, brick, poles and plank used for the surface or surplus water to pass off rapidly into