

Different Kinds or Types of Soil in Relation to Crops

Article No. 3 on "Farm Facts Every Boy Should Know"

By J. F. DUGGAR

ON THE basis of their mechanical condition soils may be divided into three principal classes (1) Those consisting chiefly of clay and silt; (2) those made up chiefly of sand; and (3) those consisting of a mixture of sand and clay in the proportions to form loamy soils.

Let us note first the main characteristics of clay soils as they determine the choice of crops best adapted to such soils. Clay soils as a rule are wet, usually requiring especially good artificial drainage. This large content of moisture causes the crops grown on them to start slowly. The excess of moisture, or rather its continuous presence in abundance, tends to make crops produced on clay soils develop a large amount of stem and foliage in proportion to fruit. Such soils are worked with greater difficulty than others, and they bake or become cloddy unless plowed or cultivated at exactly the proper time.

Each of the considerations mentioned is an argument for devoting such land, so far as practicable, to the broadcast, uncultivated crops, especially the grasses for hay or even the pasture grasses. Such soils if well drained are apt to be relatively fertile and hence may be especially suited to corn.

Sandy soils are exactly opposite in agricultural qualities to clay soils. The former are usually well drained, if the subsoil also be sandy, and quickly dry out to a point at which crops may make a rapid growth. Sandy soils also absorb heat quickly and on such soils the action of fertilizers is usually quicker than on stiffer soils. Therefore the trucker who wishes to grow vegetables for the early market chooses very sandy, well drained soils, especially for his truck crops that make their principal growth in the late winter and early spring.

Notable examples of such early crops are snap beans, English peas, Irish potatoes and tomatoes.

Among farm crops better adapted than others to make successful growth on light sandy soils are sweet potatoes and peanuts. To both of these crops there is an advantage in the mellowness of such soils, permitting the easy penetration of the peanut "needles" or pistils,—destined to develop into nuts,—and also making easier the development of the tubers of the sweet potato plant.

Since deep sandy soils are usually poor in plant food, the legumes are often selected because of their ability to grow without much nitrogen in the soil and because of their effect in transferring nitrogen from the air to the soil for the benefit of succeeding crops of non-leguminous plants. Hence peanuts, velvet beans, cow-

peas, soy beans, and even beggar weed are often grown on these light soils. They are somewhat better adapted as a rule to cotton than to corn, for reasons connected with the moisture requirements of these two plants at critical stages of their development.

Loamy soils are adapted to a wide range of crops. In fact it is scarcely too much to say that they are suitable for all the commonly grown crops of the farm and garden.

Each of the three classes of soils

crops making a large leafy growth, such as sugar cane, silage corn, grasses for hay, especially Johnson, Sudan, and orchard grass. If the soil of bottom land is acid it is usually well adapted to red top grass and to carpet grass. Lespedeza also seems to tolerate considerable acidity, although it thrives even better if some lime be present. Some lime is essential to the best growth of white and alsike clovers, which are better adapted to bottom than to upland. On bottoms may also be produced a

OUR "SUCCESS TALK" FOR BOYS

A Vigorous Message From a Wonderful Man—Admiral Peary Says Health and "Stick-to-it-iveness" Are Main Things

[Ten thousand years from now when perhaps nobody will remember the name of any President of our time, or of Bryan or Dewey or Carnegie or Rockefeller, two names will almost surely be unforgotten—the name of the man who discovered the North Pole and the name of the man who built the Panama Canal. We are fortunate in that Admiral Robert E. Peary, the discoverer of the North Pole, has sent a special message to our Progressive Farmer boys. And as Admiral Peary worked more than twenty years trying to find the Pole, it is no wonder that he tells our boys that one of the main things is to stick to a job till it is done.]

I AM glad of the fine record the farm boys of the South are making and in response to Editor Poe's request that I mention one or more qualities that I believe will help you win success as men or farmers, let me say:

The first requisite of success is HEALTH. There is no other possession equal to a sound, clean, God-given man body. Farm boys have a great advantage over their city brothers because the life and surroundings on the farm are conducive to health.



ADMIRAL PEARY

The next requisite is PERSISTENCE. Stay with a thing that has been undertaken until it is DONE. Old Seneca put it in a nutshell, "Inveniam viam aut faciat"—Find a way or MAKE one.

These two are the essentials. With health and persistence any boy can win success.

PEARY.

previously mentioned may be again divided into bottoms and uplands.

Bottoms, unless extremely sandy, are usually better supplied than uplands with a sufficient amount of moisture for the continuous growth of all ordinary farm crops. Hence in their moisture relations bottom lands are generally adapted to about the same crops as are the moisture-holding clay lands. Because of the abundant and even supply of moisture, bottom lands are especially suited to

large yield of sorghum forage, whether the soil be slightly acid or rich in lime.

Among the crops to which bottom land is usually less suitable than upland are truck crops for the early market; watermelons; cowpeas grown for seed; sweet potatoes; and peaches. This is partly because these plants tend on land continuously moist to make too much growth of wood or leaves.

(Concluded on page 14, this issue)

HE MIGHT DIE SOMETIME ANYHOW

MY neighbor's got a job for sure, he's hauled out all the cow manure; then for a week he worked away, a-filling up the yard with clay. When it was filled a couple feet, he topped the whole thing with concrete. He says he's tired of mud and slop, and so he's floored the yard on top. The springtime mud and winter rain will never more give him a pain; his stock will be all nice and dry; he'll keep them clean and not half try.

I don't mind mud and slush so much, I slop around to beat the Dutch in these hip rubber boots of mine; they keep me dry and feeling fine. I never liked to shovel sand, or mix up much concrete by hand; I'd rather sit here by the fire, and let the cows wade in the mire. Of course, it's tough on them, no doubt; when they get stuck I pull them out. The other day a pig got stuck and drowned out there in the muck. Perhaps it's well to lose him now, he might die sometime, anyhow, and, anyway, 'twould spoil their feet a-walking round on hard concrete.



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Subscribers' Corner

Why the Progressive Farmer Is Different

WHAT'S the reason I ought to take The Progressive Farmer? What's the reason other papers won't do me just as well?"

These are the questions often asked, and naturally asked, when you tell a man he ought to read our paper. Consequently we wish to point out to non-subscribers and to club-raisers just a half dozen reasons why every Southern farmer must have The Progressive Farmer no matter how many other papers he is taking.

Here they are:

I—Because It is a Weekly

MONTHLIES and semi-monthlies are too slow for this progressive age. No wide-awake farmer is now content with a farm paper that comes only once or twice a month. Take good monthlies, if you can, but get the best weeklies, by all means.

II—"The Whole Family Reads It"

IF WE are to make the rural South what it ought to be, a Land of Plenty, a Land of Beauty, and a Land of Inspiring Comradeship, the whole family must be reached. And The Progressive Farmer reaches all, inspires all, and sets all working together for "Better Farming, Better Business, Better Living." It is commonly said of The Progressive Farmer, "You can tell by a man's farm whether he reads it or not," and this is because it not only sets the farmer afire with zeal for progress, but it has the best woman's page of any American farm paper.

III—Because It's For the South, and Nothing Else

STARTED by a Confederate soldier-farmer in 1886, it has always been made for Southerners, by Southerners,—by men who know Southern farm life from actual experience—and it doesn't even try to get Northern or Western circulation. Consequently everything in it is made especially to fit our Southern climate, Southern soils, Southern crops, Southern conditions, and Southern needs.

IV—Because It Stands for Organization, Coöperation, and White Community Life

THE Progressive Farmer was fighting for education, organization and business coöperation in the dark days twenty-five years ago, before most other Southern farm papers were thought of—and has been at it ever since. We have the best Farmers' Union department in the South. The Progressive Farmer, too, is the only paper that is forever proclaiming that the South's splendid future lies not in great plantations and an ignorant tenantry, but in a great democracy of thrifty, educated, organized, home-owning small white farmers, each man under his own vine and fig tree.

V—Because We Carry Only Reliable Advertising

THE Progressive Farmer was the first Southern farm paper to guarantee the reliability of its advertisers. It was the first farm paper to stop patent medicine advertising, and the only one that refuses to carry patent medicine advertising for livestock—as fraudulent as human patent medicine advertising even if less dangerous. And it is the only Southern farm paper that has had the nerve to turn down \$5,000 worth of patent stock food advertising a year and persistently expose this great fraud upon the farmers.

VI—And Finally, Because We Guarantee Satisfaction

ANY farmer who pays us \$1 may have his money back if he will say when his time is out he has read the paper for a year and hasn't had his money's worth.

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