

The agricultural virtues of gypsum have been known since Benjamin Franklin, master of many pursuits, first demonstrated what it can do for certain soils.

Gypsum not only nourishes the soil with generous amounts of calcium and sulphur, but improves its physical properties.

Just as calcium builds bones and teeth in the human body, it contributes to the formation of plant tissues and regulates the utilization of plant nutrients. If present in adequate amounts it will assure a strong and well developed root system.

Sulphur, just as important in plant development, stimulates beneficial micro-organisms, increases the chlorophyll and vitamin A content of the plant, and is a source of amino acids, the building blocks of plant protein.

Along with its chemical attributes, physical improvements are derived when agricultural gypsum is used to treat heavy clay soils that pack tightly and crust on the surface, closing water and air pores.

Gypsum mixed with the soil gathers the fine clay particles into clusters, creating pores between the clusters, thus improving drainage and aeration. Gypsum also combats the destructive influence of excess sodium.

United States Gypsum research shows the material is most effective when mixed thoroughly to reach a greater number of soil particles and to contact the organic matter more intimately.

In off seasons, it can be spaded or raked into flower beds, vegetable plots, lawn and shrubbery sites. Where plants are growing, gypsum can be spread over the surface to enter the soil during rain-fall or drenchings with the garden hose.

It is recommended that up to 40 pounds of gypsum per 100 square feet of soil area be applied for maximum results. This is best done in spring or fall when rain-fall is usually heavier.

The company emphasizes that the use of gypsum does not obviate the necessity of maintaining soil nutrient levels with conventional fertilizers. Gypsum's job is to improve the physical condition of the soil and to furnish calcium and sulphur, which it does without changing the soil's chemical formula.



CONTROL OF GRUBS IN SOIL

CHLORDANE can be used effectively to rid soil areas of white grubs, the larvae of the common June beetle and similar pests that feed on the roots. Though toxic to such insects, chlordane is harmless to plants and, indeed, have some stimulating effects, said Dr. Roy D. Shenefelt, of the department of entomology, University of Wisconsin, in addressing a recent meeting of the Wisconsin Nurserymen's Association. In tests conducted in areas planted with young trees chlordane emulsion was used in spray form; in the preparation of seed beds for planting, chlordane dust was mixed with the soil. Both methods were effective in controlling grubs and caused no injury to the plants, Dr. Shenefelt said.



We are very sorry to report that Oscar Borgmeier is in the hospital and we wish to express our sincerest hope for his speedy recovery.

TURF GRASS DEVELOPMENTS ON FAIRWAYS

It is interesting to note the changes in fairway turf over the years, especially on watered fairways. Back in the '20s fairway turf consisted mostly of Kentucky blue grass and fescues with a great number of weeds, varying with the density of the turf. With the advent of watering systems in the late '20s and early '30s, coupled with closer and more mowing, the turf began to change over to *Poa Annua* with the fescue fading out almost entirely and the bluegrass thinning out. The weeds remained until the late '30s when arsenicals began to be used as weed killers. In the meantime creeping bent, mostly so called "native bent", began to take over large areas of fairways and with the encouragement of the Superintendent who found bent to be about the only grass that he could rely on and began seeding in the various bents such as Highland, Astoria and Seaside. There is still much controversy as to which is the best for fairway turf, but today many fairways are almost all bent with the *Poa Annua* being crowded out and Kentucky bluegrass still there but much thinned out. Weeds are in a very small minority on most good courses and even clover can be very effectively controlled. Merion bluegrass has been found to be a most excellent turfgrass and much has been seeded into fairways, being limited, however to, the scarcity and high price of the seed. *Zoyzia* and U-3 Bermuda have been discussed, but the opinion seems to be that our winters are too cold for it. Fairways are being mowed extremely close and it will be interesting to note the effect on future maintenance.



DETERGENTS FOR THE SOIL

Scientists are now talking about putting detergents in the soil to make it "wetter."

In fact, the Atlantic Refining Co. has developed such a product. It is a detergent similar to the "soapless soap" which has become popular with housewives in recent years.

When applied to the soil, it makes the wet ground "wetter," just as it does dishwasher. It thus makes the passage of minerals and water thru the pores of the soil much easier than in ordinary soil. Plant roots absorb more minerals from a detergent treated soil than from a non-treated soil.

All of this is what the chemists tell us. If the detergent "facilitates" the movement of minerals, perhaps it also would facilitate the movement of these minerals to a lower level of the soil.



The winter of 1953-54 was the mildest in 22 years and it will be interesting to note any parralel with this summer and the summer of 1932, which some of the old timers will remember was a most difficult one with fungus troubles and great infestation of webworm, coupled with much hot weather.

We might add that this has been an early spring with the turf in fine condition with very little winter injury.

George Roloff stood back and watched his wife Ruth put up the last piece of a nice job of wall papering and commented "It sure is swell to marry a talented woman".