Questions and Answers

Devoted to the discussion of intimate problems on turf culture and plant growth. We are an international authority on these subjects. Send in your contributions—\$1.00 will be paid for each one.

QUESTION:—Can you send me, or publish in your magazine some reliable data and information as to the use of iron sulphate in eliminating clover, chickweed, etc., from golf greens, also as to its use in solution in powdered form, as an ingredient in compost or fertilizer mixtures, rate of application, etc. Also what is its effect on the soil in retarding growth of grass?—V. C. Doerschuk, Massena, New York.

ANSWER:—The principal use of iron sulphate in America today is to eradicate weeds in turf, particularly dandelions. Experiments have been conducted by many of the State Experimental stations in the use of iron sulphate as a weed spray, and they have met with success with certain weeds.

The spraying method is preferred and it is customary to use 50 gallons of 20% solution of iron sulphate per acre.

Iron sulphate has been found to kill chickweed and purslane after repeated sprayings. Heal-all, gill-over-the-ground, broad and narrow leaved plantain, have either been killed or badly injured by the spray. The iron sulphate will not kill crab grass and other weed grasses. It must also be remembered that it is injurious to white clover.

Iron is an element of vital importance to the growth of green plants. A certain amount of iron seems necessary as one of the factors in the normal development of chlorophyll (leaf green), although it is not regarded as a constituent of the organic bodies which make up this substance.

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QUESTION:—Should a lawn be planted in the fall or in the spring?

ANSWER:—Both. Make one-half your planting not later than early October and sow the balance of your seed in March when the ground has "heaved" from freezing. As soon as possible after seeding, ground should be rolled when dry. Fertilization will be much more effective if put on in the late winter while the ground is in this heaved condition. (Ohio) QUESTION:—Fertilizers are sold to us, guaranteeing certain percentages of nitrogen, phosphoric acid and potash. Isn't one 8-6-2 fertilizer just as good as another made in the same proportions?

ANSWER:—No. It is not. The 8-6-2 percentages will be the same possibly, but the character of filler used will make the difference in the value. At least one-third of any complete fertilizer you buy, will be filler, in order to bring the finished product up to the proper proportions. If your filler happens to be some clean organic product which is or will early become a humus, the chemicals which provide the greater part of the 8-6-2 will become more rapidly available for plant food. If the filler used is lime, garbage tankage or similar inferior products, the action of the fertilizer will be delayed, especially if your soil is deficient in organic matter. (Penn.)

QUESTION:—Why does a clay soil produce so much better bloom than other soils, and better looking?

ANSWER:—When the leaves of a plant *begin* to mature, it begins to bloom. If it is planted in a too rich soil and the tendency is to continually grow tender foliage, the start of maturity will be delayed and there will be but small imperfect bloom. If plants are grown in a soil which will hasten maturity, such as a good vegetable garden, the plant will be matured so early that but a normal bloom will result. A clay soil will start an early maturity in the leaf but there is a longer period before the termination of maturity and a much larger and better bloom is the result. (Ohio)

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QUESTION:—Should sulphate of ammonia be used in preference to nitrate of soda for an early spring fertilizer or is cottonseed meal or soya bean meal a better source of nitrogen if mixed with early topdressings?

ANSWER:—Ammonium sulphate and nitrate of soda are both very quick acting fertilizers. Sodium nitrate is detrimental in many ways and should not be considered as replacing ammonium sulphate.

Our soil bacteria work, live and act better if given something to do even if it be but to make the ammonium sulphate into a nitrate form. Cottonseed meal and soya bean meal, mixed with topdressing, if only a nitrate feeding is needed for rapid growth, employ our soil bacteria to better advantage than do chemical fertilizers. It will leave a more lasting feeding and will leave eventually, a humus addition to the soil. (Ohio)

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QUESTION:—The backs and high spots on our greens are mown carefully but we have trouble to

keep these parts in good turf. What would be a reasonable cause?

ANSWER:—Close mowing would effect these areas but the most reasonable cause for trouble would be the "run off" of water without penetration to a sufficient depth. Slow, long sprinkling over these areas, can be the only relief. (New York).

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QUESTION:—We expect to fertilize our fairways. What is the best time of year to do this?

ANSWER:—Late in the winter while the soil is porous from freezing. Heavy rolling at this time can cause no damage if the ground is sufficiently dry and it may save some fertilizer loss from wash.

(Illinois)

Trade News About Turf Culture

KENILWORTH, ILL.

With the appointment recently of Jens Jensen, landscape artist, to direct the proposed park project for the village of Kenilworth, first steps were taken in the development of the old Mahoney farm in the suburb into a natural park.

The farm, on Sheridan road in the south limits of the village, was devised to the town by Mary Mahoney two years ago. She provided that it be transformed into a bird sanctuary and wild flower preserve so the natural park may serve as an outdoor classroom for nature studies by school children and garden enthusiasts.

BOWLING GREEN, KY.

Among the number of progressive and important steps taken by the city administration, is that which will have for its ultimate aim the establishment of a municipal park and playground that will place Bowling Green in line with all the progressive cities of the country.

Bowling Green will never spend money more wisely than when the city has finally established and put into full operation a park of this nature, fully equipped with swimming pools, tennis courts, bridle paths, and golf courses, all of which should be free for the use of the masses.

MOLINE, ILL.

Moline city council at a committee of the whole session voted unanimously to authorize the city attorney to prepare an ordinance calling for a \$60,000 bond election to provide funds for the purchase of ground on which Moline airport is situated.

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Application to the federal government for funds amounting to between \$100,000 and \$150,000 to develop the George Rogers Clark Memorial Park, west of Springfield, will be made within the next two weeks.

DES MOINES, IOWA

Reclassification of Iowa State Parks, return of some to local support, and acquisition of other property for state parks, preserves and sanctuaries is proposed in the recently submitted Iowa conservation plan.

The proposals are part of the program prepared by Jacob L. Crane, Jr., for long-time development of Iowa's outdoor recreation and nature resources.

ESCANABA, MICH.

Various improvements are now being made at the Delta county parks. R. P. Mason, county road engineer, is in charge.

DES MOINES, IOWA

A group of Kansas City, Mo., men has rented a tract adjoining highway 7, one mile west of Johnston, Ia., for a flying field.

Ernest Nolze, business manager, said they would operate a plane for sightseeing trips now.

COLOMA, MICH.

At a meeting of the board of directors of the Newton Woods Association held in Cassopolis at the office of County School Commissioner Frank Flagg, definite plans were made to raise funds with which to purchase Newton Woods for a state park, and a meeting of the preliminary finance committee was held recently. An extensive campaign will be put on in an effort to raise money to purchase the woods, which is one of the largest and finest timber tracts in the state. The tract is located near Decatur.

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WAITSBURG, WASH.

State Engineer Nelson, together with Louis Dyar, Earl Butler and Zo Atkinson, visited the site of the proposed state park at Shiloh. Nelson has started surveying the land and work of putting it in shape will be started soon. Waitsburg has raised its quota of money to buy the land and turn it over to the state.