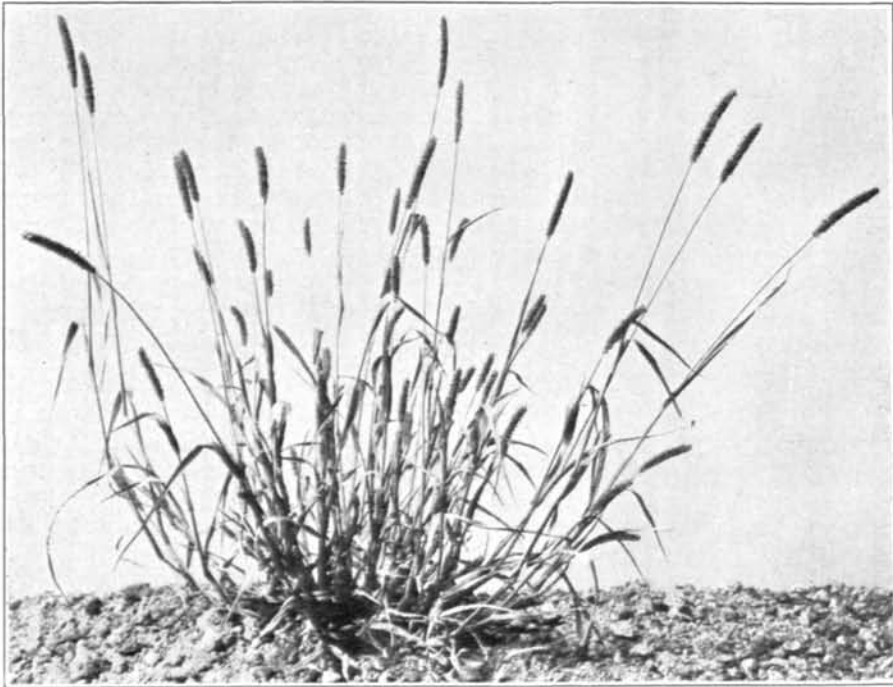


## Common Wild Foxtail Grasses

By Morgan W. Evans

Bureau of Plant Industry, United States Department of Agriculture

In the northern half of the United States there grow wild two picturesque foxtail grasses<sup>1</sup>, yellow foxtail (*Chaetochloa lutescens*) and green foxtail (*Chaetochloa viridis*). Another common name for these foxtails is pigeon grass. Yellow foxtail is the one which is more common in the Northeast. It is also the more conspicuous in meadows and fields during the last days of summer and early autumn, due not only to its greater abundance but also to its striking appearance especially as regards color of leaves, stems, and seed heads. According to Dr. A. S. Hitchcock, of the United States Department of Agriculture, the genus *Chaetochloa* includes about 65 species of grasses,



A well developed plant of yellow foxtail showing the large number of branches that may be produced by a single plant.

at least 18 of which are found in the United States. Yellow foxtail and green foxtail are annuals; others of the species, such as *Chaetochloa geniculata*, a common grass in the Southern States, are perennials. An annual species introduced into the United States and grown extensively as a hay crop is *Chaetochloa italica*, which is our common or foxtail millet.

<sup>1</sup> Yellow foxtail and green foxtail on golf courses are generally regarded as weeds. They are frequently found in fairways and rough, especially on new courses or in places where the turf is thin. They often grow around compost piles or on bare places such as those left when sod is removed. Occasionally they are found on putting greens. Where they occur in closely clipped turf they may be mistaken for crab grass or goose grass.—Editors.

Botanists distinguish grasses and other plants by certain essential differences among their parts, some of which are often invisible to the naked eye due to their minute size. These differences have been chosen as identification marks because of their persistence wherever or under whatever condition the plant may be grown. While such detailed knowledge is essential to the botanist yet a novice may learn to know plants from their more obvious characteristics. When I was a boy on my father's farm in northeastern Pennsylvania I think I knew every tree, or at least every common tree, in the locality, and could distinguish a tree of one kind from another at a distance so great as certainly to render impossible the application of the botanist's system of identification. There is something more or less intangible in the combined effect of size, form, method of branching, shade of green of the leaves, and other characteristics which gives to the tree that which is akin to personality in human beings; and this situation applies to grasses as well as to trees. If one can develop a sufficient



A well developed plant of green foxtail. Its more slender stems and pendant inflorescence distinguish it from yellow foxtail.

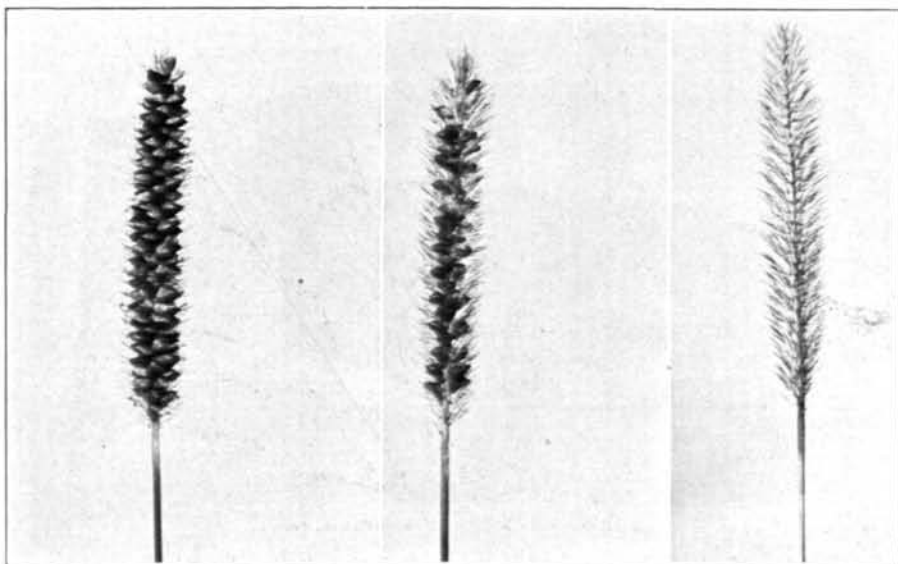
interest in grasses or other plants to note their characteristics, become familiar with their common and their scientific names, and learn something of the interrelationships of the species of plants which he studies and of their relationships to other groups of plants, he will derive a greatly enhanced pleasure and profit from his contact with nature.

In the latitude of northern Ohio, in fields where yellow foxtail grew the preceding season the seeds of the grass germinate about the first of May and produce seedlings in large numbers. In cultivated fields, where growth of the seedlings during spring is prevented by tillage, seedlings may continue to develop in large numbers from seeds which have remained dormant in the soil for months or even years, provided cultural operations cease at about the close of spring or even in early summer. During late July or early August the spike-like inflorescences appear, and late in August or early in September the seeds mature. The number of stems on a plant and the length

of the stems depend upon the conditions for growth. If the plants are much crowded, and especially if the soil is not fertile, only a single stem may be produced. Under favorable conditions the plant will branch and rebranch, until a large number of vigorous shoots have been formed.

Yellow foxtail is somewhat coarser and of more erect growth than green foxtail. The habit of growth of the two species is shown in the accompanying illustrations.

Early in the growth of yellow foxtail, when the plants have no more than 3 or 4 leaves, the sheaths of the leaves, after several days of exposure to the light, become reddish brown, and the lower parts of the plants remain thus colored, to a greater or less extent, during most of their period of growth. In late summer, as the time for the maturity of the seed draws near, the coloring of the plant becomes

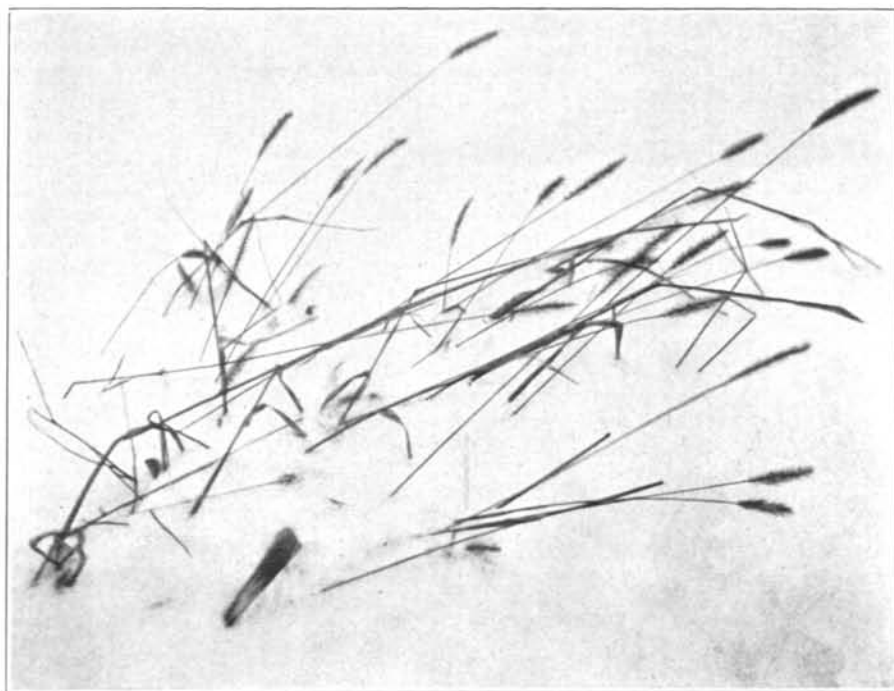


Three periods in the life of an inflorescence of yellow foxtail. The illustrations show the inflorescence about three-fourths natural size. The seeds in the seed head at the reader's left have reached maturity; in the middle head the seeds have partially fallen; the head on the right has shed all its seeds and the inflorescence retains its original outline, the bare bristles remaining for a period well into the winter.

more striking. In a field where the grass is very abundant the predominant color is the somewhat yellowish green of the leaf blades. Intermingled with this are the tawny color of the bristles of the inflorescence and the reddish brown of the lower parts of the shoots. The combined effect gives the field a somewhat golden-yellow-green color, harmonizing with the prevailing colorings of the late summer and early autumn vegetation.

The seeds of yellow foxtail become detached and fall from the inflorescence as soon as or very soon after they have matured. The bristles of the inflorescence remain, however, so that the form of the inflorescence is still retained. It reminds one of the grinning Cheshire cat in "Alice in Wonderland." The cat would slowly vanish from sight but its grin would remain. The same striking phenomenon

seems to greet us in yellow foxtail as the empty seed head persists long after its seeds have fallen. One may indeed often behold these vestiges of the inflorescence as he walks through the fields in winter.



Yellow foxtail in a blanket of snow.

They are held up on their stems, above the snow, like ghosts of the grasses of late summer.

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Pocket gophers and other rodent pests are a serious menace on golf courses, in orchards, and to irrigation dams and railway embankments in many sections of the United States. In 1928 Federal and State agencies treated 793,000 acres with poisoned bait in Arizona alone in the control of these pests, more than 130,000 pounds of the bait being distributed.

One of the finest municipal airports on the southern border, located at Douglas, Ariz., recently became infested with pocket gophers, which threw up more than 2,000 mounds of earth on the field, making the landing of planes difficult. The field is unique in that its southern border is the international boundary line between the United States and Mexico. The aviation committee of the City of Douglas requested the assistance of the Bureau of Biological Survey of the United States Department of Agriculture in clearing the field of pocket gophers and provided a crew of men to place poison and traps. Three days' work under the supervision of the Bureau's leader of rodent control in Arizona resulted in complete eradication. The control operations were conducted in cooperation with the Arizona Agricultural Extension Service.