

Bent Grasses *

An expert's views on various species and their origin

By FRED S. RADWAY

IT IS a rare privilege for a tradesman to be able to address a body of men who have not only book knowledge but also actual experience with seed and turf of bent grasses. I will try not to make a long drawn out speech but to tell you in my humble way what I learned and what I know about agrostis. Please do not hesitate to stop me if you have any questions to ask.

Red Top (*Agrostis Alba*)

AGROSTIS Alba is the mother of all bent grasses. Redtop is bent grass in a refined form, now—what is the difference between redtop and bent? How can they be distinguished? During the year of 1913 I studied seed and turf culture at Hamburg, Germany, and had experience with Holland and German redtop also with fancy Fiorin grass (this is a mixed bent grass which comes from the local district of Griesheim and Darmstadt). Redtop is a larger coarser grass than bent and sometimes it is hard to distinguish the two, especially when redtop is planted thickly and kept closely mowed, as the redtop leaf is about the size of the bent leaf. However, mowing constantly will kill the roots of the redtop in a year or two.

*Address delivered by Mr. Fred S. Radway, president of the I. L. Radwaner Seed Company, Inc., 115 Broad Street, New York City, New York, at a monthly meeting of the Philadelphia Golf Superintendents at the North Hills Club, on Monday, May 13, Mr. Lewis M. Evans presiding.

Authorities can very easily distinguish between the blade of the bent and redtop by the ligule. To distinguish the seed of the bent from the redtop one needs a 200 to 250 power magnifying glass, a microscope, technical weed seed knowledge, a lot of patience, a cool head, and maybe a warm heart.

German Bent

BOTH the Rhode Island bent and redtop are small seeds. There are about four to eight million seeds to a pound. Sometimes the bent can only be distinguished by the weed seed contents. When redtop is clean it has a silver purplish color—bent however has a yellow straw color. There are about thirty to forty pounds to a bushel.

I am not a seed analyst and I am not a seed expert, I am only a seed merchant and dare say that a sample of redtop and a sample of bent grass highly and thoroughly re-cleaned, so that there are no weed seeds in either one of them, cannot be distinguished from each other. In a seed laboratory the following three distinguishing methods are employed:

Color—Silverpurple—Straw

Weed Seed—Origin (Domestic or Foreign)
Size of seed.

And now that I have proven to you that neither you nor I can tell redtop from bent, we have to rely on tests given by government or state laboratories—and these are the only laboratories I would recommend as I believe private laboratories, no matter how good they may be, have the commercial point in view.

Creeping Bent: (*Agrostis Stolonifera*)

THIS seed creeps and multiplies by stolons. Well known strains are the blue tinted Metropolitan, the green patchy Washington, etc., these are local names used for stolons. The stolon method for greens in preference to seeding greens is a matter of personal choice.

Creeping bent grows on low land and needs plenty of water.

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South German Mixed Bent

THIS mixture contains a quantity of Creeping bent, Rhode Island bent, (*Agrostis Vulgaris*) Velvet bent, and is therefore a very desirable mixture of bents because if one variety does not do well on the green, the other will.

Rhode Island Bent: (*Agrostis Vulgaris* or *Tenuis*)

THIS seed used to come from Rhode Island—now however we send mixed German bent or Canada or Oregon-grown Rhode Island bent seed to grow in Rhode Island. My opinion against seed experts is that in order not to mix the minds of greenkeepers and superintendents and average small seed dealers is not to use the word Rhode Island bent.

Let me tell you what it is.

Agrostis vulgaris or *tenuis* in America is known as Rhode Island bent. It does not grow in Rhode Island any more in a pure condition and is not commercially cleaned or handled there. This seed is grown in Oregon but called Rhode Island bent. This seed grows in Canada, Prince Edward Island near Charlottetown and there is called Rhode Island or Prince

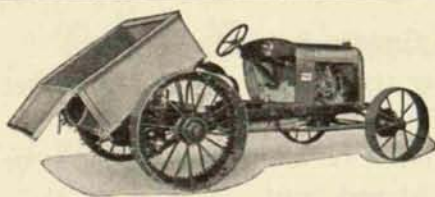
Edward Island bent, Browntop or Fog.

The story of New Zealand Colonial bent or Brown top or Waipu Browntop or Rhode Island bent is as follows: The wooden ship, Iron Man, about eighty years ago left the maritime provinces of the Scotch Highlands and immigrated to Prince Edward Island, Cape Breton and Nova Scotia and then to New Zealand. No ship was over 600 tons. They settled at New Zealand, Waipu County near clayish poor soil because the cannibals would not let them go to better places. When leaving Canada they stuffed their mattresses with new straw. On their arrival at New Zealand they discarded the straw, and on the clay soil of New Zealand a grass started to grow identical to the Rhode Island grass and is now called Browntop, Colonial bent, etc.

I had the occasion to spend two days last week at the experimental plots of Rutgers college at New Brunswick, New Jersey as the guest of Professor E. E. Evaul, and there collected much food for thought on bent grasses.

The so-called Rhode Island bent will not creep by stolons, but will grow in clay-poor

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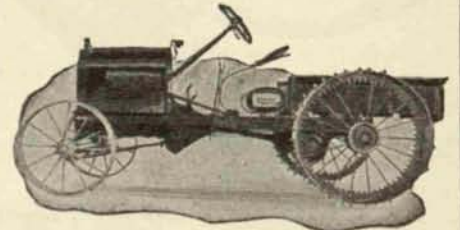
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sandy soil without much moisture. The grass grows upright from the seed, gradually thickens and spreads on the surface, it also knits well.

Now let me tell you a few words about Prince Edward Island bent. The Canadian government is subsidizing the Prince Edward Island growers association and is officially sampling and inspecting fields near Charlottetown. Seed so gathered is cleaned and exported and packed in government sealed bags, therefore giving the seed dealer and golf club a fair security as to origin, crop and quality, also the honesty as to variety and mixture.

I do not know anything about Brown Patch, I do not even know what it looks like, but I am told that Prince Edward Island bent is hardy, will withstand heat, does not need much water and will thrive on sandy soil.

Just a little personal observation on my part. You may laugh at me if you want to as my eyesight may be all wrong. I tried to distinguish the bents by their color at 100 feet distance with the following results:

Washington bent—dirty, green, low growing patchy.

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Metropolitan bent — blue, green, low patchy.

Colonial bent—dirty, brownish, high and coarse.

Velvet bent—silky carpet-like, dark green.

Oregon Coos County bent, also known as Seaside, or Maritime or Cocoos—low, fog green.

Velvet Bent: (*Agrostis Canina*)

I THINK this seed originated in Germany and sometimes two to forty per cent is contained in South German Mixed seed.

Pure strains or Velvet bent seed are now cultivated in Prince Edward Island, also at Alberta, Canada. The production of 40-80% pure seed is very small. The 1928 world harvest was about 400 pounds and price was very high. Believe about \$4.00 to \$7.00 per pound wholesale. This seed is not of any commercial interest as yet but it is very fine grass for greens. It has shoots and surface runners, no stolons. It grows on cold, high, dry, sandy climatic conditions and not much water is needed.

Carpet Bent

THIS is similar to Creeping bent—3-5 feet runners, 5-7 feet mats and cannot be obtained commercially as yet. It is part of the South German Mixed bent.

Coos County Oregon-Bent: (*Agrostis Maritima*)

SEASIDE bent also sold under a patent trade name of Cocoos bent. No seed dealer can use this word Cocoos except those who have it registered. Botanically it is a bent grass grown in Coos County, Oregon, and called Seaside bent or *Agrostis Maritima*. This can be obtained at market prices from all wholesale dealers in the East or direct from Oregon. Very

often it is mixed and adulterated like so many of the bent grasses.

Seaside bent is a creeper like stolons and is similar to South German bent but more costly in price.

Now a few words of history.

Bent prices will be higher. Our government wants to raise the duty from 2c per pound to 10c per pound during this summer.

Seed dealers generally do not know as much about Bent Grass as a first class golf superintendent would. This is not a compliment but the sad truth. Seed dealers take too much for granted. Personally, I bought a lot of Coos bent a few weeks ago, invested \$1500 in the deal and when the goods arrived I found it to be 60% common redtop. Just to show you what we are up against, the goods were returned to Oregon and the money is still coming—so is Christmas.

In 1753 Creeping bent was a well known grass in Europe.

In 1783 Seaside Coos or Maritima was a known grass in Sweden.

In 1837 in Germany.

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In 1794 Rhode Island bent or *Agrostis Tenuis* or *Vulgaris* Browntop was known in England.

According to books and research work this is all true. Therefore there is nothing new under the sun and the more I delve into the species and origin of bents the more I realize that I do not know much but I am learning to repeat what other people before me have forgotten.

In my conclusion, a few words for the poor seed merchant. We all are in the business to serve and at the same time to make an honest living.

Thousands of dollars are wasted by seedsmen and the buying public by not knowing the latin name of the bent grasses. Purchasing by commercial names may be misleading. But one thing is positive: if you buy your bent by the latin name, you cannot go wrong.

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