

BOTANICAL NAMES FOR PLANTS

by R. HAWTHORN

Botanical names! *Lolium perenne*! *Anthoxanthum odoratum*! *Lotus corniculatus*! Probably these have caused more worries to groundsmen, especially in examinations, than any other section of the syllabus, and yet if groundsmen and candidates thought a little differently about these names, there might not be the same terrific problem. I suppose most people approach these things parrot-like: they learn by heart that the botanical name for a daisy is "*Bellis perennis*" and the name itself means nothing to them. It is forgotten that these botanical names were derived to make easier the identification and classification of plants.

These botanical names are usually derived from Latin, and have been used for hundreds of years. Why was Latin used in the first place? This language was understood by educated people throughout the world in the Middle Ages—when the first attempts were made to identify plants—and although fewer people study and know Latin today, it is still used by scientists as an international language.

When plants were collected and used for various purposes, it was necessary to be able to tell them apart. Early, primitive people knew that some plants had leaves or fruits that could be eaten, and some provided poisons which could be used on arrows; others could be used as dressings on wounds or as medicines. Do you ever remember as a child when you were stung by a nettle and you went looking for a dock leaf? You put this on the nettle sting, and almost miraculously the pain of the sting seemed to lessen.

It was the collection of plants for medicinal uses that formed the basis of botany in most parts of the world until the sixteenth century. Today there are more than 2,000 species found wild in the British Isles, but the story of the gradual building up of botanical knowledge begins in the far off days of the

primitive people gathering medicinal herbs and it was only in the middle of the sixteenth century, during the Renaissance, that the crude lore of the medicine man began to give way to the knowledge of the scientists.

Beginnings of British Botany

William Turner, a Northumbrian who was a student of medicine in 1520 at Cambridge, mentioned some 300 native species of plants, which he described from his own observation and experience. Slightly later, Mathias de l'Obel, a Flemish doctor who settled in England in 1568, managed to identify another 80 plants which were unknown to Turner.

In 1629, an expedition left London and headed into the wilds of Kent.

This, although the people concerned may not have realised it, was a landmark in British field botany, because they set out with the intention of looking for plants as plants, and not as herbs for medicinal use. In all these early stages of the identification of plants, there would be a mass of description of leaf shapes, colour or flower characteristics. They would be known by a long, descriptive sentence, which to say the least, would be unwieldy.

John Ray

John Ray now enters the scene, and he seems to have been a remarkable man. A blacksmith's son, he was born in Essex in 1627, and through the interest of the vicar of Braintree, who must have sensed something special about Ray, he went up to Catherine Hall, Cambridge. He eventually became a Fellow and then a tutor. He also published a catalogue of plants found in Cambridgeshire, but this was something more than a list of plants found in a limited area in Britain, for Ray tried to sort out the chaos of cross-references, long and obscure descriptions, and he

(contd. on p. 10)

(contd. from p. 8)

went a long way towards doing just that.

He produced a manageable mixture of names on which he and his successors were able to build a sound knowledge of our plant life. He went on to produce other books, one of which was the first and long-awaited complete description of British flora, which about this time listed about 1,000 species.

By the middle of the eighteenth century, plenty of botanists were carrying on Ray's work in this country, but nothing out of the ordinary had happened. Indeed, in the year 1734 one professor of botany at Cambridge did not deliver a single lecture—because there were no students there to hear him! British botany certainly seemed to be at low ebb.

Linnaeus

In Sweden, however, something new had happened. Carl von Linne, known to the world by his Latin name Linnaeus, was building his system of classification that was soon to take the botanical world by storm. He hit upon a very simple and very useful method of plant identification. He pointed out that the number of stamens in a flower is always the same in the same kind of plant—any flower in the Iris family, for example, always has three, any flower in the Amaryllis family has six, and so on. This classification system was most effective, but Linnaeus himself realised that it was not a natural one. Plants with the same number of stamens were not necessarily closely related. For instance, the mint, with its opposite leaves, square stems, strong smell and four stamens is obviously related to the sages which share these characteristics—and different only in the number of the stamens, sages only having two. A more natural system would have been one that classified plants by their ancestry and how they developed. This, indeed, is the now generally accepted system that has been evolved by the people who give plants their names.

In spite of the simpler method of

naming plants introduced by Linnaeus, it is possible that the system would not have had such appeal if it had not also introduced the "bi-nomial" method of naming the plant, instead of the cumbersome polynomial method in use before. The bi-nomial method simply means that the plant has only two parts to its name, while the polynomial name had three, four or more parts to it. Linnaeus undertook the task of naming and classifying the whole living world from beetroot to butterflies. What is more, he achieved his objective; he brought order out of chaos, and indexed the vegetable world on a basis so sound and acceptable, that to this day most of his names are still in use.

Of the two names given to each plant, the first one is the generic name (group of genus). This, if you like, corresponds to our surname, the family name, but calling it a family name *can* cause some confusion, especially when natural orders get involved. The second name, the specific name (species) is only given to one plant of the same genus—liken this, if you like, to a person's

(contd. on p. 12)

FOR FAST GREENS



FIT A GRASS COMB
TO YOUR MOWER

STEWART & CO.,
FINE TURF SPECIALISTS
EDINBURGH. EH2 2AY

(contd. from p. 10)

Christian or given name. In some cases, a third name is added, when the plant is a variation of the species. This third name is the variety or varietal name, and can be likened to another Christian name, or nickname.

Putting all this into something we know, let's have a look at two lawn grasses, Chewings Fescue and Creeping Red Fescue. Their respective botanical names are *Festuca rubra commutata* and *Festuca rubra grina*. Leaving all the explanations of the meaning of the Latin names until later, it can be seen that both are in the *Festuca* class, both are in the *rubra* species, and it is only in the variety stage that they are different, thus showing that, for practical purposes, there is not a great deal of difference between the two grasses.

What those Latin names mean

The Latin names of plants often refer to some part of the plant which makes it stand out. For instance, the Latin name for Foxglove is *Digitalis purpurea*, and it is helpful to realise that **digitalis** comes from the Latin "belonging to the fingers" thence the popular name, and **purpurea** means "purple"—the colour of the flowers. The three common Plantains are called *Plantago major*, *Plantago media* and *Plantago lanceolata*. This is descriptive of the size of their leaves, their respective common names being greater plantain or broadleaved plantain, hoary plantain and ribwort.

The botanical name may refer to something else of importance about the plant. *Odorata* means a sweet-smelling plant, like *Anthoxanthum odoratum*, a grass which gives off a fragrant smell when cut or crushed. *Repens* means a plant that creeps — for example, *Trifolium repens* (white clover).

The botanical name **officinalis** is often come across, and it simply infers that the plant was used in medicine. It comes from the word **officina**, the name given to the storeroom of a monastery where medicines were kept. Examples of this are *Taraxacum officinale*, the dandelion, which once

was used for the treatment of liver complaints, and *Cochlearia officinalis* (scurvy grass), which contains vitamin C and was once eaten by sailors to prevent scurvy.

Plants are sometimes called after the botanists who first discovered them, or reintroduced them to some country. *Gagea lutea*, the Yellow Star of Bethlehem, was named after Sir Thomas Gage, and Honeysuckle (*Lonicera periclymenum*) was named after Adam Lonicer, a botanist from Frankfurt.

Some are called **alba** because they are white, some **rubra** because they are red, some are **aquatilis** because they grow in water. Some are called **vulgaris** because they are common, and some **pratensis** because they grow in meadows.

All botanical names have a meaning but the most important thing about them is that they can be understood all over the world. Ragwort is a common plant often described as a weed of turf. It is also called in various places St James wort, staggerwort, stammerwort, stinking weed, stinking Willie, etc. A bit confusing, but it has only one botanical name, and that is *Senecio jacobaea*, a name by which it is known throughout the world. This of course is the real value of botanical names.

At first the use of botanical names may be strange to a lot of people, but it is only a matter of use. Once botanical names get widely used, the strangeness will vanish. Campanula, veronica and clematis are all botanical names in common use, as are geranium, dahlia, primula, pyrethrum and a host of others. What is so difficult then about botanical names?

Somebody is going to say "I know what is difficult about them, how to say them". I daresay a lot of people will agree that pronunciation is difficult, and I daresay that a lot of people will disagree about the way the words should be said. Shall the "c" be hard or soft? Shall the "c" in Cyclamen be pronounced as in Sickle or as in Comet? Personally, I do not think it really matters so very much. Let the syllable be sounded as it is written. Break up the word into bits, and say it in the most

(contd. on p. 15)



B.G.G.A. in 1946. During the last two years he has written extensively on the game of golf, including a history of the Little Aston Golf Club; the History of Golf Greenkeeping; and also on the Wild Life on the Golf Course. He was made a Life Member of the B.G.G.A. in 1968. He recommends greenkeeping for anyone wanting a healthy outdoor life, especially on a course as beautiful as Little Aston. Cecil is now 67 and is still going strong. Long may he continue in his job. A great record of service for all three brothers.

(contd. from p. 12)

convenient way to you. No arbitrary rules of pronunciation can be laid down; after all, the Oxford Dictionary gives a choice of pronunciation for some words, even English ones, so some variation in the way that botanical names are pronounced can be expected.

With all that said, it may be a good idea to get down to actual names and to some idea of the meaning behind them. To go through the entire list of flowering plants would be a fantastic

SITUATIONS VACANT

HEAD GREENKEEPER REQUIRED, fully qualified. Apply in writing with details of past experience to the Secretary, Old Fold Manor Golf Club, Hadley Green, Barnet, Herts. Modern bungalow available, rent and rates free. Present greenkeeper retiring at end of 1969.

AN EXPERIENCED UNDER GREENKEEPER required by Dyrham Park Country Club, Galley Lane, Barnet, Herts. Good wages offered, accommodation available if required. Apply in writing to "The Captain", stating experience and wages required.

EXPERIENCED GREENKEEPER required. Cottage available, wages by negotiation. Prospects for promotion. Apply The Secretary, Moor Park Golf Club, Rickmansworth, Herts. Telephone Rickmansworth 73146.

HEAD GREENKEEPER REQUIRED for 18-hole links course. Salary negotiable according to experience. No accommodation available. Apply The Secretary, Fleetwood Golf Club Ltd., Princes Way, Fleetwood, Lincs.

job, and, I think, beyond the needs of the majority of people who will read this article. If the weeds that are commonly found in turf and the grasses that are used or found on playing fields are discussed, this, I feel, would be all that need be done for the purposes of the readers of this journal . . .

(to be continued)

With grateful acknowledgments to "The Groundsman".