

## THE SPOKEN "X" IN HYBRID BINOMIALS

Plant names are not only to be read but commonly to be spoken as well. Teachers, professors, lecturers, conservationists, extension service workers, field trip leaders, and so on – all are called upon to communicate plant names orally, both colloquial names and scientific. If we are talking about a species in English, for example, we might say "white oak, *Quercus alba*." If a variety we would say "ground juniper, *Juniperus communis* VARIETY *depressa*." If a form, "oblique grapefern, *Botrychium dissectum* FORM *obliquum*." More and more the educated public wants to hear the scientific name from the botanical speaker. This is probably a part of the swelling world-wide interest in the role of ecology in our lives. Even politicians, dealing with problems in endangered species and impact conservation, desire the "official" Latin names rather than the unstable, locally varying vernacular names. A substantial responsibility of modern systematists is the facilitation of spoken communication with students, scientists and technicians of other disciplines, administrators, and the general public.

A vexing problem in oral discourse of botanical nomenclature is what to do with the "X" in binomials, denoting hybrid origin of the plant named. I notice that many lecturers avoid the problem entirely rather than try to handle it. For the common eastern American Bibb's hybrid oak, for example, they simply say "*Quercus bebbiana*" in spite of the fact that all writers designate it as "*Quercus X bebbiana*." The International Code of Botanical Nomenclature gives us the guidelines for designating hybrids (1972, Appendix I, Names of Hybrids, pp. 71-74). We may choose to express hybrids with a formula, such as "*Quercus alba X macrocarpa*," arranging the parents according to the alphabet. When we say this there is no problem. For "X" we enunciate the word "TIMES."

The problem is that the same multiplication sign has also been adopted in our nomenclature for those hybrids to which we have seen fit to give binomials rather than formulas. It is this "X" that causes speakers trouble. What solutions are available to this problem in oral mention of a hybrid taxon? Interpreted strictly as "times," the multiplication sign in genetics and taxonomy calls traditionally for two parents. In binomials, on the contrary, we are using it to indicate the *hybrid nature of the taxon*, the special flavor of its origin. "X" means that "This is an interspecific hybrid – *Quercus bebbiana*," or "*Quercus bebbiana* – an interspecific hybrid." This being so, I suggest that the best procedure is to translate the "X" of a binomial simply as "hybrid." This is the word that should be interpolated each time an interspecific hybrid is referred to in speaking. For an intergeneric hybrid, instead of saying "EX *Agropogon*" or "TIMES *Agropogon*" or omitting this important part of the name entirely, one can say "HYBRID *Agropogon*" or "INTERGENERIC HYBRID *Agropogon*," thereby stating the special or unusual nature of that taxon.

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