

pretty safe from the casual flower-picker; but the beautiful *C. acaule*, inhabiting open woods is not so protected, and frequently falls a victim to passersby. Consequently it is becoming decidedly scarce in populated districts. This, however, is due to an accident of civilization, and not to any natural exigency.

The peculiar flowering habits of *Epipactis* have been frequently noticed before. One may sometimes find large numbers of their beautifully veined leaves, but not a single blossom. The dozen or so plants of *E. pubescens* which I know of around here blossomed freely for several years past until this summer, when only one plant put forth a flowering spike. On the other hand, in a small swamp where I never saw more than two or three of the plants in blossom before, this year I counted 132 fine spikes of *E. repens*, and later observation shows that they have nearly all set seed.

This raises the question as to what happens to the immense quantity of seeds which an orchid produces every year. A rough count of the seeds in a capsule of *Cypripedium parviflorum* showed the number to be about 10,000. A single capsule of *Habenaria hyperborea* easily contains 2,000 seeds, and as a large plant bears some 15 or 20 such capsules, the total number of seeds to a plant is 30,000 to 40,000. A well grown specimen of the small *Liparis Loeselii* produces 60,000 seeds in its six or eight capsules. *Microstylis unifolia* never seems to get more than two to four of its blossoms fertilized, but each of its tiny capsules contain some 1,200 seeds. Large as these figures seem, they are nothing to the almost incredible profusion of seeds grown by some tropical species. A German botanist found 1,756,440 seeds in a single capsule of a *Maxillaria*, and the plant sometimes bore half a dozen such capsules. Darwin estimated the seeds produced annually by an European species of *Orchis* at 186,000, and shows that if all the seeds grew, by the third generation the descendants of a single plant would be sufficient to "clothe with one uniform green carpet the entire surface of land throughout the globe." But, in spite of this immense production of seed, orchids, even in the tropics are never very plentiful when compared with other families, and in this country they are always decidedly scarce. As they are practically all cross-fertilized the number of bad seeds must be very small, and admitting that they are somewhat fastidious in their various habitats—the saprophytic coral-roots, for instance, requiring a quite special soil—one would nevertheless imagine that a dozen or so at least of the many thousands of seeds set free by even a single plant would find some suitable soil near the parent. But, nothing of the kind occurs. The same plants come up