

florets look like little seedlings growing from the tassel. Some of these "seedlings" were separated and propagated vegetatively.

Sherret S. Chase  
Devender K. Nanda

### 3. Nodal proliferations in maize (Zea mays L.).

Leaf-life proliferations arising from the basal region of the nodal disc have been observed in Illinois and Nebraska in the inbred line DeKalb 9061 derived from an open-pollinated variety, Golden Republic, and in certain hybrids involving this line. These proliferations develop most strikingly on the two to three nodes below and the two to three nodes above the ear as well as the ear-bearing node itself. These leaf-like structures are quite brittle. The number of such proliferations may vary from a few (two to three) per node to as many as fifteen or more, and the number may be different on various nodes of the same plant. The size of these vegetative out-growths is relatively small in the inbred line itself, being about half an inch to one inch in length, while in single, three-way and double crosses, these proliferations may be very prominent and may vary from 2.5 to 3.0 inches in length. The presence or absence, and the degree of development of the proliferations is apparently greatly influenced by environment. Although the proliferations themselves do not appear to be smut induced, smut is often found associated with them. Attempts are presently being made to study the inheritance of this characteristic.

Sherret S. Chase  
Warren Holdridge

### 4. Recovery of a cytoplasmic male-sterile androgenetic monoploid from a $4nTx2n$ cross in maize.

In androgenesis in maize, the male gamete, essentially a naked nucleus, presumably utilizes the cytoplasm of the female for its development into a sporophyte. Androgenesis has been found to occur at the rate of about 1/80,000 in diploid progenies of maize. If either the frequency of androgenetic individuals can be increased or their detection made more effective, this phenomenon may be profitably employed in the conversion of homozygous lines with normal cytoplasm to forms with "Texas male-sterile" cytoplasm.