hirsutum L. cultivars for interspecific hybrid cotton production. 79-103, an F₁ selection from the cross of experimental strains 6505-33-3-1 and 6612-62-5, and 79-106, an F₁ selection from the cross of experimental strains 6505-33-3-1 and 6614-91-1, are approximately 2 weeks earlier maturing than 'Pima S-5,' the current commercial American Pima cultivar. 79-103 has short hybrids.

Vivó tests and, when used to pollinate a standard cms line CM 400, no cytoplasm of the annual species H. annuus, cv. Saturn (3). It is a potential new source of cytoplasmic male sterility. Pollen fertility was similar to that described for CMG-1. Crosses of four H. giganteus/wild H. annuus/ 4* Saturn lines with the three restorer sources Bb2al, RHA 273, and RHA 280 gave F₁ plants with complete or partial restoration of pollen shed with Bb2al only, but not with either RHA 273 or RHA 280 (E. D. P. Whelan, unpublished data). Parental lines in the composite were extremely variable for all plant and seed characteristics, and expressed marked hybrid vigor. The 1,000-seed weight and oil content for 328 H. giganteus/wild H. annuus/3* Saturn plants varied from 20 to 121 g, and 27.9 to 50.1%, respectively.

Germplasm CMG-3 (GP4) is an open-pollinated composite of eight lines from two interspecific F₁ hybrids, from the three-way cross H. maximillanii/wild H. annuus Association 1357/2* Saturn. Advanced backcross generations segregated for plants with highly modified and almost vestigial anthers that contained little or no pollen. Trisomic (2n + 1) plants with normal pollen shed also occurred (5). Parental lines in the composite were less variable and not as vigorous or branched as those in CMG-2. The 1,000-seed weight for 51 H. giganteus/wild H. annuus/3* Saturn plants ranged from 38 to 120 g, and 41 to 135 g, respectively. Oil contents of the same materials were 30.8 to 50.6%, and 25.7 to 47.9%, respectively.

Limited samples of the three germplasm composites can be obtained from Dr. Roland Loiselle, Plant Gene Resources of Canada, Agriculture Canada, Research Branch, Ottawa, Ontario, Canada K1A 0C6.

REFERENCES

REGISTRATION OF 16 LINES OF CLUB WHEAT GERMPLASM1
(Reg. No. GP 140 to GP 155)
R. E. Allan and J. A. Fritchett1

The isolines of winter wheat (Triticum aestivum L. em. Thell.) listed in Table 1 were selected from the backcross population 'Omar'// 'Suwon 92'® Omar. This backcross series was started in 1959 with the primary objective of transferring the two semidwarf genes of Suwon 92 (CI 12666), both singly and in combination, to Omar (CI 13072). Suwon 92 has both the SDi and Sd4 genes for semidwarf stature (1, 4). The accepted symbols for these two genes have been redesignated as Rthi and RthA, respectively (5). A secondary objective was to transfer a gene for stripe rust (caused by Puccinia striiformis West) resistance from Suwon 92 to these genetic stocks. Omar is a winter-type, mid-season to late, mild-tall, white-stemmed cultivar1