than in C103. Some of its crosses have been observed to root lodge badly.

N14 (Reg. No. GP 40), released in 1969, was developed by selfing in the ‘Stiff Stalk Synthetic 1.’ It sheds pollen profusely from a very large and well-branched tassel. It yields poorly as a line per se. N14 is dark green in color with moderate plant and ear height. It yields well in crosses but has relatively poor stalk quality and machine-combines poorly. The grain in crosses tends to be low in quality, low in test weight and susceptible to mold. The line is very susceptible to H. turcicum but the Ht version is satisfactory. Maturity classification is about AES700.

N20 (Reg. No. GP 41), released in 1973, is a 600 maturity inbred developed from Stiff Stalk Synthetic 1. It flowers about 1 week later than A619 and about the same time as A257. It is a tall line with above-average ear height, has only fair yield as a line, and has ears that are slightly shorter than average with slightly above-average kernel row number and good husk cover. N20 has better than average resistance to Diplodia maydis (Berk.) Sacc. inoculation. It is slightly better than average in resistance to eyespot, aphids, and second brood corn borer. It is slightly poorer than average in reaction to Helminthosporium maydis Nisikado and Miyake race o, and Phyllosticta sp. (yellow leaf blight). It is below average in reaction to H. maydis race T and maize dwarf mosaic virus. Maturity classification is about AES600.

N21 (Reg. No. GP 42) was released in 1969. It was developed by selfing in an outcross of N35. It is a tall line with fairly high ear placement. N21 yields well as a line per se as well as in hybrid combinations. It stands fairly tall in some combinations, and the crosses also tend to have fairly high ear placement. Although N35 has excellent ear retention, N21 is not outstanding in that respect, especially at high population densities. Maturity classification is about AES800.

N28 (Reg. No. GP 43), released in 1964, was developed by continued inbreeding and selection from Stiff Stalk Synthetic 1. It is about 3 days later than B14A in flowering. Plants are of low to intermediate height with relatively low ear placement. The plants are dark green, with stalks of large diameter and with very rigid mechanical structure of both stalk and leaf tissue. The leaves usually exhibit an erect growth habit. Bright yellow grain is produced on ears with short shanks. The ears are normally short, conically shaped, with deep kernels. Moderately branched tassels are fully extended prior to pollen shed and are characterized by bright yellow anthers. N28 has been found to be one of the more tolerant lines to western corn rootworm. It is very heat tolerant, with average cold germination but below-average seedling vigor. It dies prematurely and is susceptible to Fusarium sp. stalk rots. It is susceptible to H. turcicum and below average in reaction to leaf creekles and wilt, but is above average in reaction to wheat streak mosaic virus. The grain is soft and susceptible to mold and dries slowly after black layer formation. In crosses it machine-combines poorly at high moisture but yields well and has excellent roots with the ability to extract surface moisture under drought conditions. It has a long silk delay but resists barrenness in crosses. Maturity classification is about AES800.

N31 (Reg. No. GP 44) was released in 1964. It was developed by continued inbreeding and selection from the Stiff Stalk Synthetic 1. It flowers about the same time as B14A but with less silk delay. Plants are of low to intermediate height with medium ear placement. The leaves are very dark green, wide, of medium length, and erect. Stalks are rigid, with above

**REGISTRATION OF GERmplASMS**

The following yellow dent inbred lines of maize were developed by the Nebraska Agricultural Experiment Station, and released for public use in 1973. They were maintained by sib mating. Seeds may be purchased from the Department of Agronomy of the University of Nebraska.

**REGISTRATION OF FOUR GERmplASMS**

**(Reg. No. GP 46 to GP 49)**

W. A. Compton

The following yellow dent inbred lines of maize were developed by the Nebraska Agricultural Experiment Station, and released for public use in 1973. They were developed in Nebraska, and released for public use in 1973. They were developed by the Nebraska Agricultural Experiment Station, and released for public use in 1973. They were released by continued inbreeding and selection from (B14 X Oh43) B14. It was originally developed for use with N6 in hybrid combination. It flowers about 3 days later than B14A. It has a large, very stiff tassel and is taller than average line. It has a thick rind and is not outstanding in that respect, especially at high population densities. Maturity classification is about AES700.

N138 (Reg. No. GP 45) is approximately 87.5% inbred and was released in 1964. It was developed by selection from (B14 X Oh43) B14. It was originally developed for use with N6 in hybrid combination. It flowers about 3 days later than B14A. It has a very hard stalk and cob. Its grain yield is average but the Ht version is satisfactory. Maturity classification is about AES600.

N103 (Reg. No. GP 46) is approximately 75% inbred and was released in 1964. It was developed by selection from (B14 X Oh43) B14. It was originally developed for use with N6 in hybrid combination. It flowers about 3 days later than B14A. It has a very hard stalk and cob. Its grain yield is average but the Ht version is satisfactory. Maturity classification is about AES700.

N104 (Reg. No. GP 47) is approximately 75% inbred and was released in 1964. It was developed by continued inbreeding and selection from Stiff Stalk Synthetic III. It is a sister line to N104, both being the same S line. N103 flowers about 3 days later than B14A and has very upright leaves and a very rigid crushing strength resistance. It yields well as a line, to tiller. It has more than average kernel rows and good husk cover. It has excellent downy mildew resistance, and is better than average in reaction to eyespot, maize dwarf mosaic virus, diplodia, and second brood corn borer and root regeneration after rootworm damage. Maturity classification is about AES800.

N105 (Reg. No. GP 48) is approximately 87.5% inbred and is a sister line of N103 above. It was developed by N101 in a reciprocal full-sib program. N104 is one of the Nebraska Stiff Stalk Synthetic III populations released about 2 days later than B14A. It is a tall line with a high leaf area, has more than average kernel rows (16-18), excellent ears and good husk cover. It has a very hard stalk and has good first-brood corn borer resistance and average second-brood resistance as well. It yields in resistance to ear rot, downy mildew, and maize dwarf mosaic virus. It is somewhat poorer in resistance to smut and root regeneration after rootworm damage. It is slightly poorer than average to aphids and corn earworm. Maturity classification is about AES800.

N132 (Reg. No. GP 49) is approximately 87.5% inbred and was selfed from the ‘NB1111 (A)’ synthetic 1 day later than B14A. It is light green in color between the leaves, and is medium in height. It tends to tiller under cool, wet spring conditions. Its seeds are small and somewhat irregular. It has a very rigid mechanical structure of both stalk and leaf tissue. The ears are normally short, conically shaped, with deep kernels. Moderately branched tassels are fully extended prior to pollen shed and are characterized by bright yellow anthers. N132 has been found to be one of the more tolerant lines to western corn rootworm. N138 is somewhat poorer than average in reaction to H. turcicum, aphids and rootworm, but the Ht version is satisfactory. Maturity classification is about AES800.