more nubbin ears (6). Yield of grain was also greater than the
variety. Ear height was 22% greater than the variety. TJeMP-5
has a maturity similar to TJeMY-14 (AES 1000).

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REGISTRATION OF 10 GERMPLASM LINES OF
MAIZE
(Reg No. GP 106 to GP 115)

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Four white dent maize (Zea mays L.) lines (T61, T101, T111,
and T115) and six yellow dent maize lines (T8, T204, T220,
T224, T226, and T232) were developed and released coopera-
tively by the Tennessee Agric. Exp. Sta. and USDA. The lines
have been tested extensively and all are being used in hybrid
production and as germplasm sources in developing new lines.
The lines are maintained by and are available from the Dep. of
Plant and Soil Science of the Univ. of Tennessee.

T61 (Reg No. GP106) was released in 1957. It was developed
by continued inbreeding and selection from the variety Neal
Paymaster. It is in the AES 1000 maturity class. T61 is medium
in plant and ear height with a fair stalk but poor root system.
It is a good pollen producer. It has a medium-size, tapered ear
and produces a white grain on a red cob. The husk covering is
only fair to good. The line is highly prolific and yields well as
an inbred. It also imparts high combining ability in crosses. The
line has shown good resistance to the virus disease complex
(maize dwarf mosaic virus and maize chlorotic dwarf virus).

T101 (Reg No. GP107), released in 1961, was developed from
the cross (ExL) X Florida Laguna 916. E and L were two selves
from WF9xOh51 while Laguna 916 was derived from the cross
Laguna 13 x Fla. 4-32. T101 is a tall, vigorous-growing inbred
with a medium-high ear placement on a slender stalk. It has
a fair to good stalk and is a good pollen producer. It is a single-ear
inbred with a long husk cover that imparts a degree of resistance
to corn earworm. The ears are short with a large white cob and
it produces a deep, shoe-peg type white grain. It has no signifi-
cant virus resistance but is fairly resistant to most other diseases.
It is in the AES 1000 maturity class.

T111 (Reg No. GP108) was released in 1961 after continued
inbreeding and selection in the variety Jellicorse. It has a simi-
lar maturity rating to T61 and T101 (AES 1000). T111 is a good
pollen producer but is only fair yielding as an inbred. It pro-
duces a medium-short plant with a low ear placement on a sturdy
stalk. T111 has broad, dark green leaves. It is semi-prolific with
ear size medium in length with a medium circumference, and
produces a medium thick, white grain on a white cob. T111 has
a very long husk which often results in poor pollination. It has
moderate resistance to the virus disease complex.

T115 (Reg No. GP109), also released in 1961 and developed
from continuous inbreeding and selection in the variety Jellicorse is earlier flowering than T111 (AES 900). It is a poor
pollen producer but is high yielding as an inbred. It has a
medium-tall stalk with a low ear placement on a slender stalk.
T115 produces two to three small slender ears per plant and
imparts this character in hybrids. Husk length is medium with
excellent grain quality, making a good milking corn. Combining
ability is high in hybrids. Root strength is good but it is suscepti-
ble to stalk lodging. T115 has fair to good resistance to the virus
disease complex. It is a natural restorer to T- and S-type cyto-
plasms but not to C-type cytoplasts.

T8 (Reg No. GP110) was released in 1957 after continued self-
and selection since about 1930 in the variety Jarvis Golden
Prolific. It is earlier than most mid-season types (AES 800) and
has been used in combinations for early maturing hybrids. It is a
good pollen producer and has a medium height stalk and ear
placement. T8 is partially prolific and produces a dark orange-
colored, flinty-type grain on a slender white cob. Although it has
a short husk cover, grain quality is excellent. It has good resis-
tance to corn earworm (Heliothis zea, Boddie) and the virus dis-
ease complex. Combining ability is high, but it is used mostly in
crosses and in selection programs for its good root, stalk, and
grain qualities.

T204 (Reg No. GP111) was released in 1961. It has the same
parentage as T101, yellow grain being selected following the
second self. It is a full-season inbred in Tennessee (AES 1000).
T204 is a tall, vigorous-growing inbred with a high ear place-
ment. Pollen production is only fair. Stalk and root qualities are
good. It is strictly single-eared with a long husk. The large flat
WF9-type, dark yellow kernels are produced on a short and larg-
e cob. T204 has good general combining ability.

T220 (Reg No. GP112), released in 1966, was selected from
the cross T61 x Hills Yellow Dent and backcrossed once to T61.
It is classified as an AES 900 maturity inbred. T220 produces
a short, sturdy stalk, but has a relatively high ear placement. It has
good root and stalk qualities but the stalks are subject to bacte-
rial stalk rot caused by Erwinia carotovora var. zae Sabet. It has
a broad, dark-green leaves. The inbred will produce two ears per
stalk under good conditions and is high-yielding as an inbred.
The medium-size ears have a medium-short husk. The medium-
sized, flat, yellow, dimple dent kernels are produced on a redu-
ced cob. T220 has good combining ability and is generally used as
the seed parent. It has fair resistance to the virus disease com-
plex.

T224 (Reg No. GP113), released in 1966, was selected from
the cross T115 X (I205 xL289) and backcrossed once to T115. It
is similar in characteristics to T115 but is earlier in maturity
(AES 800). It produces only a fair amount of pollen on a
medium-tall plant and has a medium-low ear placement. It has
only a fair root system and is subject to stalk lodging. T224 pro-
duces two to three short, slender ears on each stalk. The slightly
flinty, dark yellow, large flat kernels are produced on a white
cob. Combining ability is good. T224 has fair to good resistance
to the virus disease complex and it is a natural restorer to bot-
T- and S-type cytoplasts.

T226 (Reg No. GP114) was released in 1961. It was selected
from a cross between a selection from the Huffman variety and
RB893 with a backcross to RB893. RB893 is a modified WF9

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