FIELD CROP VARIETIES

for

THE NORTHERN PIEDMONT

and

WEST OF THE BLUE RIDGE

Fall, 1962 — Spring, 1963

Circular 887, Revised September, 1962

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The varieties listed are those which after extensive testing in comparative tests conducted by the Virginia Agricultural Experiment Station have proven to be superior in yielding ability, disease resistance, quality or other factors which determine their net value to you, as an expert in agricultural production. More detailed information concerning each variety may be obtained from one of the following references which are available at your County Extension Office or Regional Research Station.

References

Results of Barley, Oat and Wheat Varietal Tests Conducted in Virginia in 1961 — Experiment Station Research Report No. 60, *Evaluation of Forage Crop Varieties in Virginia* — Experiment Station Bulletin 528, *Virginia Sorghum Varietal Tests 1959-61* — Miscellaneous Mimeograph, *Varietal Tests of Sudangrass and Pearlmillet in Virginia 1954-59* — Experiment Station Research Report No. 38, *Annual Lespedezas — Culture and Use* — U. S. D. A. Farmers' Bulletin No. 2113, *Sun-Cured Tobacco Production* — Extension Service Circular 653 Revised, *Virginia Flue-Cured Tobacco Variety Guide for 1960* — Extension Service Circular 768 Revised, *Corn Performance Test for 1961* — Experiment Station Research Report No. 62, *Planting Midland and Coastal Bermuda Grass*, Extension Circular 881. Unpublished annual reports from Research Stations located near Orange, Steeles Tavern, Blacksburg, and Glade Spring.

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FACTORS TO CONSIDER WHEN CHOOSING A VARIETY

Availability of Good Seed

The crop you harvest can't be better than seed you plant. The Extension Service and Experiment Station strongly recommend the use of seed of certified quality. Individual characteristics of each variety are genetically controlled. Using certified seed or seed of equal quality is your best guarantee that the seeds you plant are genetically pure, mechanically clean and will perform as described in this circular. It is often a better practice to plant good seed of the second most desirable variety rather than poor seed of the most desirable variety.

Adaptation

Of those tested, the varieties listed in this circular are best adapted for the area West of the Blue Ridge and the Northern Piedmont. Before planting an unlisted or new variety, be sure it is adapted to your farming conditions.

Maturity

The best variety for you matures in time for harvest not only with relation to climatic conditions but to coincide with other crops in the rotation, the best marketing period and the availability of time, labor, and equipment. The length of time, from planting to maturity, varies with date of planting, climatic conditions, and other factors for each variety. However, most varieties will keep the same maturity relationship.

Method of Harvest and Use

Factors affecting the harvesting and keeping qualities of the varieties were measured at or after plant maturity. When the crop is used for hay, pasture, silage, these effects are usually lessened.

WINTER WHEAT VARIETIES

Recommended Varieties	% Relative Yielding Ability (1)	Maturity	Winter Hardiness	Lodging Resistance	Plant Height	Leaf Rust Resistance	Mildew Resistance	Soil Borne Mosaic Resistance
Taylor 49	107	Med.-Late	Fair	Fair	Medium	Fair	Poor	Good
Red Coat	101	Med.-Late	Good	Good	Med.-Short	Excellent	Good	Good
Dual	97	Med.-Late	Good	Fair	Med.-Short	Good	Poor	Good
Tayland	100	Med.-Late	Fair	Good	Med.-Tall	Fair	Poor	Poor
Thorne	100	Late	Good	Good	Med.-Tall	Poor	Poor	Good
Seneca	100	Late	Good	Good	Med.-Tall	Poor	Poor	Good

(1) Average % yield compared with Seneca when tested at the same locations during the same year.

GOOD SEED DOESN'T COST — IT PAYS

OAT VARIETIES

Recommended Varieties	% Relative Yielding Ability (2)	Maturity	Lodging Resistance	Plant Height	Winter Hardiness	Crown Rust Resistance	Victoria Blight Resistance	Halo Blight Resistance
WINTER OATS								
Roanoke (1)	97	Medium	Fair	Tall	Fair	Good	Good	Fair
Arlington (1)	100	Medium	Fair	Tall	Fair	Fair	Poor	Poor
Atlantic (3)	107	Medium	Fair	Tall	Good	Fair	Poor	Poor
Dubois	107	Medium	Good	Short	Very Good	Fair	Good	Good
Lee	99	Med.-Late	Good	Medium	Good	Poor	Good	Poor
Forkedeer	113	Med.-Late	Poor	Tall	Very Good	Poor	Good	Poor
Bronco	110	Med.-Late	Good	Medium	Very Good	Fair	Good	Poor
SPRING OATS								
Mo. 0-205	106	Medium	Good	Medium	.....	Fair	Good	.....
Andrew	100	Medium	Fair	Medium	.....	Poor	Good	.....
Newton	107	Medium	Good	Medium	.....	Poor	Good	.....
Clarion	97	Medium	Good	Medium	.....	Poor	Good	.....

(1) Recommended only for Piedmont and areas of Lee and Scott Counties with elevations of less than 1,000 feet.

(2) Average % yield compared with Arlington Winter Oats or Andrew Spring Oats when tested at the same locations during the same years.

(3) To be dropped from the list of recommended varieties after 1962.

BARLEY VARIETIES

Recommended Varieties	% Relative Yielding Ability (3)	Maturity	Winter Hardiness	Lodging Resistance	Plant Height	Head Type	Test Weight Per Bushel	Mildew	Scald
Dayton	121	Early	Fair-Good	Fair	Tall	Bearded	Good	Poor	Poor
Kenbar	98	Med.-Early	Fair-Good	Poor	Medium	Bearded	Good	Fair	Fair
James (1)	97	Med.-Early	Fair	Fair	Tall	Awnletted	Good	Good	Fair
Wong	100	Medium	Fair	Fair	Tall	Awnletted	Good	Good	Poor
Kentucky # 1(2)	92	Med.-Late	Excellent	Poor	Tall	Bearded	Fair	Poor	Fair
Hudson	106	Late	Good	Fair	Medium	Bearded	Very Good	Good	Excellent

(1) Not recommended for planting West of Blue Ridge.
(2) To be removed from list of recommended varieties after 1962.
(3) Average % yield compared with Wong when tested at the same locations during the same year.

YOU'RE PROTECTED BECAUSE IT'S INSPECTED — PLANT CERTIFIED SEED

Red Clovers

Chesapeake — has good seedling vigor and good yielding ability. Highest yielding variety tested at four locations for three years.

Kenland — is resistant to southern anthracnose and tolerant to some root rots which assist in maintenance of good yields.

Pennscott — possesses strong seedling vigor and is resistant to some of the root diseases which assist in maintenance of good yields.

Virginia adapted — includes only the older strains of red clover which are grown in the Northern Neck area. Different seed lots may show considerable variation; therefore, it is most important to know the origin. Does not yield quite as well as previously mentioned varieties.

White Clovers

Ladino — a giant perennial white clover which grows taller and more dense than common white clover.

White Dutch — more persistent but lower yielding than Ladino.

Annual Lespedeza

Korean — not a variety — it is larger, more coarse and earlier maturing than Striate (common) lespedezas.

Rowan — variety of Korean — it has some resistance to the root knot nematode and to powdery mildew. Out-yields all other annual lespedezas when grown on soil infested with these nematodes.

Kobe — a variety of Striate — its stems and leaves are smaller, it is slower starting and later maturing than Korean lespedezas.

HYBRID

Because many factors should be considered when
ing program, V. P. I. does not recommend hybrid
selection of the hybrid that will best suit your p
for your consideration. Ratings are comparative

Variety	Relative Maturity	Standability	Ear
Pioneer 371 (2)	Early	Good	Low
DeKalb 414 (2)	Med.-Early	Fair	Low
Pioneer 345	Med.-Early	Good	Med
DeKalb 441 (2)	Med.-Early	Very Good	Med
Pioneer 329 (2)	Med.-Early	Good	Med
DeKalb 427 (2)	Med.-Early	Good	Low
Pioneer 354	Med.-Early	Good	Med.
Pioneer 342B (2)	Med.-Early	Fair	Med.
Funk G76	Med.-Early	Very Good	Low
SS Shawnee	Med.-Early	Good	Medi
Funk G72	Med.-Early	Excellent	Low
Pioneer 319 (1)	Med.-Early	Good	High
Pioneer 345A	Medium	Good	Med.
Funk G91	Medium	Good	High
US 13	Medium	Fair	High
Ruff 188 (2)	Medium	Excellent	Med.
Pioneer 300H (2)	Medium	Good	High
VPI 426	Medium	Very Good	Med.
DeKalb 683	Medium	Very Good	Medi
Supercrost 690 (1)	Medium	Very Good	Med.
DeKalb 630 (1)	Medium	Fair	Med.
SS Munsee	Full	Good	Med.
DeKalb 812 (1)	Full	Excellent	Med.
Funk G134	Full	Very Good	Med.
PAG 418	Full	Very Good	Medi
Funk G96	Full	Very Good	Medi
Supercrost 851 (1)	Full	Fair	Med.
Wood V26Y	Full	Very Good	High
PAG 434 (1)	Full	Very Good	High
Muncy Chief 780 (2)	Full	Good	Med.
VPI 648	Late	Very Good	High
VPI 646	Late	Very Good	High
SS Matoaka	Late	Good	High
Funk G144	Late	Very Good	Med.
SS Cherokee	Late	Good	High
SS Catawba	Late	Good	Med
DeKalb 640 (2)	Late	Excellent	High
PAG 444 (1)	Late	Very Good	Med.
Wood V44 (1)	Late	Very Good	High

(1) Tested at Orange only.

(2) Tested at Emory and Blacksburg only.

(3) Varieties which show increases in % relative yielding abi
in making silage.

selecting a specific hybrid for a particular farm-
orn varieties. In an effort to assist you in the
rticular needs the following information is given
nly with those hybrids listed.

leight	Husk Coverage	Percent Relative Yielding Ability 12,600 Plants/A	16,300 Plants/A
	Fair	87	89
	Fair	90	102
Low	Good	100	103
Low	Fair	96	94
ım	Good	100	103
	Fair	95	95
Low	Good	97	96
Low	Fair	103	98
	Good	103	93
ım	Excellent	86	94
	Excellent	98	94
	Good	110	109
Low	Good	106	109
	Fair	111	104
	Good	105	97
High	Excellent	102	99
	Excellent	105	109
Low	Good	95	94
ım	Excellent	100	101
Low	Good	94	89
Low	Good	97	94
High	Excellent	95	97
Low	Good	96	108
High	Excellent	99	99
ım	Fair	109	103
ım	Fair	106	101
Low	Excellent	91	94
	Good	101	99
	Fair	99	103
High	Good	103	93
	Fair	107	107
	Fair	105	105
	Fair	100	106
High	Excellent	105	103
	Fair	90	94
High	Fair	98	92
	Excellent	90	87
High	Fair	101	104
	Excellent	94	99
		100%=107.5 bu./A	100%=110.3 bu./A

ity when planting rates are increased are suggested for use

ALFALFA VARIETIES

Recommended Varieties	% Relative Yielding Ability (1)	Type (2)	Stem Size	Root Rot Resistance	Leaf Spot Resistance	Bacterial Wilt Resistance	Southern Anthracnose Resistance	Winter Hardiness
Atlantic	99	Variegated	Medium	Poor	Fair	Fair	Good	Excellent
Buffalo	94	Common	Medium	Poor	Poor	Excellent	Fair-Good	Good
Narragansett	104	Variegated	Fine	Poor	Fair	Poor	Fair	Excellent
Williamsburg	100	Common	Medium	Fair	Poor	Poor	Good	Good
Du Puits	100	Flemish (3)	Coarse	Poor	Good	Poor	Poor	Very Good

(1) Based on data obtained from tests conducted at Orange and Blacksburg. 100% = 4.59 tons/A.
(2) Variegated alfalfas tend to give a higher percentage of their total growth in the first two cuttings.
(3) Cold-hardy common type from Europe.

USE CERTIFIED SEED AND ASSURE GENETIC PURITY

Summer Annual Forage Grasses

Sudangrass Types (1)

Sudax SX11 — is a hybrid Sudan — Kafir is the highest yielding Sudangrass type tested during the past three years. It is characterized by large stems and leaves and better disease resistance than the true Sudangrasses. It recovers rapidly after cutting. Best adapted for use as green chop feed. When used for grazing, intensive rotational grazing should be used.

Greenleaf Sudangrass — contains a relatively high proportion of sweet plants. Yields have been satisfactory. Can be used for hay, grazing, or green chop feed because of its finer stems.

Piper Sudangrass — has good seedling vigor and is earlier maturing than other Sudangrasses. Best choice for planting later after small grain harvest. Yields have been equal to Greenleaf.

Pearl Millets (2)

Gahi 1 — This hybrid has been the highest yielding of all pearl millets tested. It is characterized by good seedling vigor, leafiness, late maturity, and good recovery. Best use is for green chop feed. When used for grazing, intensive rotational grazing should be practiced.

Starr — This synthetic variety is the leafiest highest quality summer annual forage grass. Although yields are sometimes only 80-85% those of Gahi 1 and Sudax SX11, many persons find the better quality worth the reduction in yield.

"Common" — Not a variety. Often seed of other varieties which has lost its varietal identity. Thus far fields planted with these seed have done well although plantings from different seed lots have shown considerable variation.

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(1) All of these grasses have the potential to give prussic acid poisoning. New growth should not be used for grazing, hay, green chop or silage until it has reached a height of 18" regardless of the manner in which growth was stopped; harvest, drought or frost.

(2) Pearl Millets are non-toxic at all stages of growth. They also have better resistance to leaf diseases than the Sudans.

Bermudagrass (Forage)

Midland (1) — a hybrid, cold-hardy variety adapted in all areas of the state below 2,000 feet elevation.

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(1) Sterile hybrid must be propagated vegetatively by cuttings (sprigs).

Tall Fescue

Kentucky 31 and Alta — have the ability to establish stands rather quickly and to grow under conditions less favorable for other cool season grasses.

Orchardgrass

"Domestic" — has greater persistence and is more productive under Virginia conditions than imported strains.

Potomac — equal to "Domestic" in persistence and productivity, has some resistance to rust. Seed of known origin are available.

Soybeans (Oil)

Clark — is a good yielder with good standability; however, beans deteriorate rapidly under warm humid conditions or when left in the field for extended periods. It is also susceptible to root rot and purple stain.

Bethel — A late maturing variety with good yielding ability. It matures about 6-8 days later than Clark and has better seed quality. It is resistant to pod and stem blight (moldy bean), frog-eye leaf spot, and a common species of root knot nematode.

Burley Tobacco Varieties

Kentucky 16 — Kentucky 16 has a wide range of adaptability and is performing well on many farms on which diseases are not a problem. This variety has a *moderate* level of root rot resistance.

Burley 1 — Burley 1 has high resistance to black root rot. It has high quality, is fine textured, and thin bodied. It produces a high percentage of cigarette tobacco. This variety produces about 7 more leaves than most other varieties. It should be topped in bud or early flowering stage. The lower leaves tend to fire readily, especially if topped late and when not clean suckered.

Burley 2 — This variety was originated in Tennessee, and is similar to Kentucky 16. It has about the same level of resistance to black root rot as has Kentucky 16. The performance of Burley 2 has been slightly better than 16.

Burley 21 — This is a vigorous growing variety that has performed well. It appears to have a wide range of adaptability. It has resistance to black root rot, wild fire and mosaic.

Kentucky 9 — This is a new "stand-up" variety released by the Kentucky Station. It has leaves slightly wider than Burley 21. Information to date

indicates that the quality of Kentucky 9 is not as good as Burley 21, and that the percent of leaf in relation to lugs and flyings is a little greater. This variety has resistance to black root rot, wild fire and mosaic.

Kentucky 10 — This variety is similar in appearance to Kentucky 9 and has resistance to the same diseases as Kentucky 9.

Burley 37 — This variety, released by the Tennessee Station in 1959, is recommended for areas where black shank is a problem. It is superior to Burley 11-A in Black Shank resistance, yield, and value per acre. It also has resistance to Root Rot and Fusarium Wilt. The leaf is shorter and broader than Burley 21. In the absence of Black Shank, this variety will generally yield less and produce lower acre values than the better old line varieties.

Combine Type Hybrid(1) Grain Sorghums

DeKalb C44A — A short, medium early maturing, open headed variety with good head exertion and good resistance to lodging.

RS610 (Texas 610) — a medium maturity, medium height plant with fair resistance to lodging and good head exertion. Planting seed are white, grain is red.

Texas 620 — Very similar to RS610 except it is slightly taller and has not yielded quite as well.

DeKalb E56A — Full season in maturity and of medium height. This variety has the best lodging resistance of the recommended varieties. Its open head has good exertion.

Texas 660 — This full season variety has fair lodging resistance and good head exertion. It is medium tall and has not yielded as well as earlier maturing varieties. Seed are white, grain is red.

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(1) Do not save seed for planting.

THERE IS NO SUBSTITUTE FOR GOOD SEED

Field Crop Varieties
For
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