REGISTRATION OF CROP VARIETIES

Table 1. Mean performance of Renville, Capital, and Mandarin (Ottawa) in regional tests at various locations in their areas of adaptation.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Seed yield</th>
<th>Lodging resistance</th>
<th>Maturation</th>
<th>Height</th>
<th>Flowering</th>
<th>Seed size</th>
<th>Seed weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/acre/ft</td>
<td>%</td>
<td>days</td>
<td>ft</td>
<td></td>
<td>lb/1000</td>
<td>lb/1000</td>
</tr>
<tr>
<td>Renville</td>
<td></td>
<td></td>
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<tr>
<td>Capital</td>
<td></td>
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<tr>
<td>Mandarin</td>
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</tbody>
</table>

* From 1 (erect) to 5 (prostrate). J From 1 (excellent) to 5 (very poor).

Sonora alfalfa

Sonora alfalfa (Medicago sativa L.) was developed and tested cooperatively by members of the Southwest Alfalfa Group, which includes alfalfa breeders, agronomists, and entomologists of the Arizona, California, and Nevada Agricultural Experiment Stations, and the Crops and Entomology Research Divisions, U. S. Department of Agriculture. It was released by these Agencies in January 1963.

Sonora is a 13-clone synthetic. Four of the parent clones were obtained from plantings in Arizona, 6 from the Imperial Valley of California, 2 from Bakersfield, California, and 1 from Logandale, Nevada. All were selected from the variety African. Initial selection was based on resistance to the common biotype of the spotted alfalfa aphid, Therioaphis maculata Buckton. Final selection was based on polyphagous prey performance for forage production and other agronomic characteristics. These tests, consisting of progeny from a total of 110 African selections, were conducted at Arizona’s Branch Stations at Mesa, Safford, and Yuma. Similar tests with fewer entries were conducted at Stations in southern California and Nevada. Arizona members of the Southwest Alfalfa Group made the original combination of the 13 parent clones of Sonora.

Sonora appears similar to the variety Moapa in resistance to the spotted alfalfa aphid and to the two species of southern root-knot nematode (3). Sonora has shown less susceptibility to downy mildew than Moapa or African in field trials at Mesa, Arizona, and El Centro, California. Stand persistence of Sonora has been equal to that of African, but less than that of Moapa.

Sonora appears to have adapted best to the desert valley areas of Arizona, California, and southern Nevada. It is outstanding in its ability to establish a stand rapidly, and to produce more forage during the cooler months of the year than Moapa or African (1, 2, 4). In the Southwest, winter forage production is desired both for grazing and hay.

Sonora alfalfa is limited to two generations of increase from breeder seed. Under seed certification, the generations shall be foundation and certified. The parent clones of Sonora are maintained by the originating Stations.

Linore flax

Linore (Linum usitatissimum L.) (C.I. 1742) originated as a single plant selection from among 10 different fiber flax varieties that had survived a freeze of —1°F. on January 31, 1950, at the Agricultural Experiment Station in Corvallis, Oregon. Since Linore is not a fiber type, it probably originated from a mixture with seed flax or from an outcross with seed flax. This variety was released for distribution in Oregon in 1962.

Linore is a cold-tolerant variety of winter flax that has a document growth habit during the winter months, subsequently becoming more erect with the advent of warm spring weather. It remains productive for a longer period in the late winter and early spring than do Caldwell, Newruck, C.I. 1909, and C.I. 1910. Under western Oregon conditions it is a more cold-tolerant variety than any of the other varieties tested.

Linore has survived temperatures as low as —18°F. and —12°F. on January 11 and 12, respectively, in 1963 at the Pendleton Branch Experiment Station, with less than an inch of snow cover.

This variety has a characteristic of profuse tillering which manifests itself particularly at lower rates of seeding. It grows to a height of 50 inches with blue flowers, large brown seeds, and indelible bolts.

Linore is resistant to all North American races of rust but is moderately susceptible to pasmo and has some susceptibility to wilt.

The quantity and quality of oil of this variety is good.

Linore ranks first among all other varieties tested for two years when fall seeded as a winter flax at Corvallis, Oregon. The 2-year average of yield of Linore was for the period 1961-63.

Sonora was favorably reviewed by the National Certified Alfalfa Varieties Review Board November 12, 1962, and was subsequently approved for release.

LITERATURE CITED


