Crabapple species and cultivars were observed over a five-year period to screen the many new ones and compare them with the older selections.

Flowering characteristics were considered primarily, but other important criteria also were evaluated. These include growth form, resistance to wind deformity, foliage diseases, and fruit qualities (size, color, quantity, and retention).

Based on flower and foliage characteristics, some of the outstanding cultivars in the trial were Golden Gem, Inglis, Radiant, Royal Ruby, Snowdrift, and Vanguard, and Dorothea.

Although some species bear fruit which drops prematurely or shrivels, Spring Snow does not produce any fruit—nor consequently any litter. Particularly attractive in the fall are those which retain...
colorful fruit: Dorothea, Inglis, Jackii, Pink Spires, Red Jewell, Silver Moon, and Snowdrift.

Rust and scab reduce vigor and cause unsightly leaves and defoliation. These diseases are worst during extended rainy periods in April and May. Most native (Malus ioensis) crabs are inherently weakened by foliage diseases. These include Prairie Rose, Plena Nova, and Klehm's Improved and M. coranaria Nieuwlandiana, which are susceptible to cedar rust. Strathmore, Eleyi, Jay Darling, Alemy, and Hopa are severely affected by apple scab.

This summary represents preliminary observations and is not intended as a final evaluation. Because some recent introductions have not yet flowered, it is too early to evaluate their ornamental qualities. Some varieties in this report are not yet available in the nursery trade.

Sources
A. Cole Nursery Co., Circleville, Ohio
B. Hillside Nursery, Wichita, Kansas
C. Interstate Nurseries, Hamburg, Iowa
D. Mt. Arbor Nurseries, Shenandoah, Iowa
E. Princeton Nurseries, Princeton, New Jersey
F. Simpson Orchard Co., Vincennes, Indiana
G. Skinners Nursery, Topeka, Kansas
H. Smith Nursery, Charles City, Iowa
I. USDA Plant Introduction Station, Ames, Iowa
J. USDA Plant Introduction Station, Glenn Dale, Maryland
K. Willis Nursery, Ottawa, Kansas
<table>
<thead>
<tr>
<th>Name of Species and/or Cultivar</th>
<th>Disease</th>
<th>Bloom Dates</th>
<th>Flower Fruiting</th>
<th>Habit</th>
<th>Color</th>
<th>Description and Comments</th>
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<tbody>
<tr>
<td>'American Beauty'</td>
<td>E</td>
<td>4/4-4/10</td>
<td>3</td>
<td>Poor</td>
<td>M</td>
<td>OR</td>
</tr>
<tr>
<td>'Snowcloud'</td>
<td>E</td>
<td>4/4-4/14</td>
<td>5</td>
<td>Poor</td>
<td>S</td>
<td>Y</td>
</tr>
<tr>
<td>'ink Perfection'</td>
<td>E</td>
<td>4/4-4/5</td>
<td>6</td>
<td>Poor</td>
<td>S</td>
<td>Y</td>
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<tr>
<td>'Sundog'</td>
<td>H</td>
<td>4/1-4/12</td>
<td>7</td>
<td>Messy</td>
<td>L</td>
<td>R</td>
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<tr>
<td>'Silver Moon'</td>
<td>I</td>
<td>4/10-4/25</td>
<td>6</td>
<td>Exc.</td>
<td>T</td>
<td>BR</td>
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<tr>
<td>'White Candle'</td>
<td>C</td>
<td>4/1-4/15</td>
<td>7</td>
<td>Messy</td>
<td>S</td>
<td>OR</td>
</tr>
<tr>
<td>'Pink Spiros'</td>
<td>C</td>
<td>3/30-4/12</td>
<td>6</td>
<td>Good</td>
<td>S</td>
<td>DR</td>
</tr>
<tr>
<td>'Pink Cascade'</td>
<td>C</td>
<td>3/30-4/10</td>
<td>6</td>
<td>Messy</td>
<td>S</td>
<td>OR</td>
</tr>
<tr>
<td>'Spring Snow'</td>
<td>C</td>
<td>3/30-4/10</td>
<td>8</td>
<td>Fruitless</td>
<td></td>
<td></td>
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<tr>
<td>'Royal Ruby'</td>
<td>F</td>
<td>4/10-4/20</td>
<td>9</td>
<td>Poor</td>
<td>S</td>
<td>OR</td>
</tr>
<tr>
<td>4-17</td>
<td>C</td>
<td>4/1-4/14</td>
<td>9</td>
<td>Fair</td>
<td>M</td>
<td>OR</td>
</tr>
<tr>
<td>'Lemonized'</td>
<td>A</td>
<td>4/5-4/18</td>
<td>7</td>
<td>Good</td>
<td>S</td>
<td>O-Y</td>
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<tr>
<td>'Lemoinsl Prairie Rose'</td>
<td>A</td>
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<td>Good</td>
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<tr>
<td>'Snowdrift'</td>
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<td>Exc.</td>
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<tr>
<td>'amoldiana'</td>
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<td>S</td>
<td>O-Y</td>
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<tr>
<td>'K-64'</td>
<td>C</td>
<td>4/3-4/12</td>
<td>6</td>
<td>Good</td>
<td>M</td>
<td>OR</td>
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<tr>
<td>'Dolgo'</td>
<td>K</td>
<td>4/1-4/12</td>
<td>3</td>
<td>Messy</td>
<td>XL</td>
<td>BR</td>
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<tr>
<td>'purpurea 'Eley'</td>
<td>K</td>
<td>4/4-4/15</td>
<td>4</td>
<td>Messy</td>
<td>L</td>
<td>OR</td>
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<tr>
<td>'Vanguard'</td>
<td>K</td>
<td>4/1-4/10</td>
<td>9</td>
<td>Poor</td>
<td>M</td>
<td>R</td>
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<tr>
<td>'Ray Darling'</td>
<td>K</td>
<td>4/4-4/16</td>
<td>3</td>
<td>Messy</td>
<td>L</td>
<td>R</td>
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<tr>
<td>'Inglis'</td>
<td>K</td>
<td>4/5-4/18</td>
<td>9</td>
<td>Exc.</td>
<td>S-M</td>
<td>BR</td>
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<tr>
<td>'Barbara Ann'</td>
<td>C</td>
<td>4/5-4/16</td>
<td>7</td>
<td>Fair</td>
<td>L</td>
<td>DR</td>
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<tr>
<td>'Red Jade'</td>
<td>A</td>
<td>4/8-4/15</td>
<td>6</td>
<td>Exc.</td>
<td>S</td>
<td>BR</td>
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<tr>
<td>'Royalty'</td>
<td>G</td>
<td>4/4-4/16</td>
<td>4</td>
<td>Poor</td>
<td>M</td>
<td>P</td>
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<tr>
<td>'Radiant'</td>
<td>G</td>
<td>4/1-4/15</td>
<td>8</td>
<td>Fair</td>
<td>M</td>
<td>OR</td>
</tr>
<tr>
<td>'Almay'</td>
<td>B</td>
<td>4/4-4/15</td>
<td>4</td>
<td>Poor</td>
<td>M</td>
<td>OR</td>
</tr>
<tr>
<td>'Patricia'</td>
<td>B</td>
<td>4/9-4/16</td>
<td>3</td>
<td>Poor</td>
<td>L</td>
<td>OR</td>
</tr>
<tr>
<td>'Hopa'</td>
<td>B</td>
<td>4/1-4/12</td>
<td>7</td>
<td>Messy</td>
<td>M</td>
<td>Y-OR</td>
</tr>
<tr>
<td>'Tschonoski'</td>
<td>I</td>
<td>none yet</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
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<tr>
<td>Variety</td>
<td>Rating</td>
<td>Flowering Date</td>
<td>Fruit Retention</td>
<td>Size</td>
<td>Color</td>
<td>Remarks</td>
</tr>
<tr>
<td>---------------------</td>
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<td>--------------------------------------------------------------------------</td>
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<tr>
<td>'Centennial'</td>
<td>D</td>
<td>4/1-4/10</td>
<td>5</td>
<td>Messy</td>
<td>XL</td>
<td>Pinkish-white bud, opens to large single white bloom against green apple-like leaves and yellow bark. Edible, sweet fruit.</td>
</tr>
<tr>
<td>'Floribunda'</td>
<td>D</td>
<td>4/16-4/30</td>
<td>8</td>
<td>Messy</td>
<td>X G</td>
<td>Late to leaf out, apple-like native crab, late blooming. Large pink buds inside tree open to large double pink flowers.</td>
</tr>
<tr>
<td>'Golden Gem'</td>
<td>J</td>
<td>none yet</td>
<td></td>
<td>Messy</td>
<td>S Y</td>
<td>Late to leaf out, upright dense crown, dark-green healthy foliage. Reportedly pink buds, white flowers, yellow fruit.</td>
</tr>
<tr>
<td>'Edith'</td>
<td>J</td>
<td>none yet</td>
<td></td>
<td></td>
<td></td>
<td>showy, a favorite annual bloomer.</td>
</tr>
<tr>
<td>'Mill End'</td>
<td>J</td>
<td>4/5-4/10</td>
<td>1</td>
<td></td>
<td></td>
<td>Vigorous, oval crown, Red Delicious-like dark-red bark. Red buds, open pinkish-white.</td>
</tr>
<tr>
<td>'Hedwigiae'</td>
<td>J</td>
<td>none yet</td>
<td></td>
<td></td>
<td></td>
<td>Irregular growth, oval crown, dark-copper new leaves. Young tree, no flowers.</td>
</tr>
<tr>
<td>'Seldirk'</td>
<td>I</td>
<td>4/4-4/10</td>
<td>4</td>
<td>Fair</td>
<td>L OR</td>
<td>Early, reddish new leaves. Red bud opens to medium size dark-lavender single flowers.</td>
</tr>
<tr>
<td>'Dorothea'</td>
<td>C</td>
<td>4/5-4/20</td>
<td>8</td>
<td>Exc.</td>
<td>M Y</td>
<td>spreading crown full of red buds, opening to semi-double pink flowers. Showy, a favorite annual bloomer.</td>
</tr>
<tr>
<td>'Coralburst'</td>
<td>A</td>
<td>4/10-4/20</td>
<td>3</td>
<td></td>
<td></td>
<td>Tiny flower buds unfold before leaves. Small coral red flowers fade to pink.</td>
</tr>
<tr>
<td>Sargentii</td>
<td>G</td>
<td>Early April</td>
<td></td>
<td></td>
<td></td>
<td>Flower date not observed. Profuse, nearly white buds and flowers. 'Rosa' differs only in rose pink buds. Red fruit.</td>
</tr>
<tr>
<td>'Newswandiano'</td>
<td>C</td>
<td>4/10-4/20</td>
<td>6</td>
<td>Good</td>
<td>S DR</td>
<td>Open to irregular growth early flowers, maroon buds, open to small dull-lavender, not showy against reddish new growth.</td>
</tr>
<tr>
<td>'Dainty'</td>
<td>C</td>
<td>4/4-4/8</td>
<td>5</td>
<td>Fair</td>
<td>T DR</td>
<td>Large round-headed tree, dark-red buds open to single dark-pink flowers partially hidden by early reddish-green leaves.</td>
</tr>
<tr>
<td>'Profusion'</td>
<td>D</td>
<td>4/4-4/18</td>
<td>7</td>
<td>Exc.</td>
<td>S BR</td>
<td>Large round-headed tree, dark-red buds open to single dark-pink flowers fading to light-pink. Showy.</td>
</tr>
<tr>
<td>'Sparkler'</td>
<td>D</td>
<td>4/1-4/10</td>
<td>8</td>
<td>Fair</td>
<td>S BR</td>
<td>Upright vase crown, dark-red buds open to semi-double medium size pink flowers. Showy.</td>
</tr>
<tr>
<td>'Makamik'</td>
<td>D</td>
<td>4/1-4/10</td>
<td>9</td>
<td>Messy</td>
<td>L OR</td>
<td>spreading crown, full of red buds opening to large dark-pink single flowers fading to light-pink. Showy.</td>
</tr>
<tr>
<td>'Red Jewell'</td>
<td>A</td>
<td>4/10-4/20</td>
<td>7</td>
<td>Exc.</td>
<td>S BR</td>
<td>Much winter damage '74-'75. Pink blossom, red fruit persists.</td>
</tr>
<tr>
<td>'Red Splendor'</td>
<td>D</td>
<td>Mid-April</td>
<td></td>
<td>Good</td>
<td>S R</td>
<td>A Siberian crab reportedly having large single white flowers. Small fruit is retained well. Seed propagated from isolated trees or grafted. Small tree, single white flower. Not vigorous and has not flowered. Reported to have pinkish-white flowers and attractive red fruit which persists well.</td>
</tr>
<tr>
<td>boxicota 'Jackii'</td>
<td>KSU</td>
<td>Mid-April</td>
<td></td>
<td>Exc.</td>
<td>S DR</td>
<td></td>
</tr>
<tr>
<td>zurni calocarpa</td>
<td>B</td>
<td>Has not flowered</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1. Refer to sources, this publication.  
2. Disease rated 0-9 with 0 = none, 9 = severe. Mean of 3 replications.  
3. Flowering during 1977 season was rated 0-9 with 0 = none, 9 = most floriferous.  
4. Fruit retention rated on 5/21/77. Thos rated Excellent still retained attractive fruit post Nov. 15.  
"Tiny," Small, "Medium," Large, "Extra Large."  
Color: R = Red, BR = Bright-Red, D = Dark-Red, OR = Orange-Red, Y = Yellow, G = Green.