REGISTRATION OF UC-1 SAFFLOWER

(Reg. No. 6)

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'UC-1' safflower (Carthamus tinctorius L.), in a sense, is the first commercial variety of a new oil crop. Comparable analyses of the oils of UC-1 and 'US-10' gave the following fatty acid compositions:

<table>
<thead>
<tr>
<th>Fatty acid</th>
<th>UC-1</th>
<th>US-10</th>
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</thead>
<tbody>
<tr>
<td>Linoleic</td>
<td>15.2%</td>
<td>79.6%</td>
</tr>
<tr>
<td>Oleic</td>
<td>78.3%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Stearic</td>
<td>1.2%</td>
<td>2.0%</td>
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<tr>
<td>Palmitic</td>
<td>5.3%</td>
<td>7.6%</td>
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</table>

The oil of UC-1 is similar chemically to olive oil. In tests it has looked promising as a cooking oil in comparison with hydrogenated commercial frying oils (1,2). The oil characteristics of UC-1 and US-10 are governed by alleles at one locus, similar to N-10 (8,9). Fj plants from this cross were crossed again to US-10 in 1962. Selfed F2 plants from the latter cross with genotype ohol (iodine value between 90 and 99) were identified in 1964 and increased as F3 lines in 1965 under isolation. After oil analyses and iodine value determinations, six lines were composed as UC-1.

UC-1 is similar to US-10 in appearance, oil content and yield. Both are early, spiny, and have yellow flowers.

UC-1 was recommended for certification in 1966, and the first certified seed grown in 1967. It is expected that UC-1 will be grown in amounts sufficient to test commercial interest in the new type of oil. If there is a good demand for the oil, it will be quickly replaced by varieties with higher yields and higher oil contents.

Literature Cited