

| 課題名   | 47. カンキツの品種系統、経営方式による労働投入係数について  |       |       |       |       |       |          |         |       |       |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|---|--|-------|-------|-------|-------|-------|----------|---------|-------|-------|-----|--|--|--|-----|--|------|--|--|--|-----|-----|-----|-----|-----|--|--|-------|-----|-----|--|-------|-------|-------|-------|-------|-----|--|-------|-------|-----|-----|-------|------|-----|-----|------|-----|----|-------|------|--|----|-----|-------|------|-----|------|--|---|------|------|--|----|---|---|------|------|------|--|---|------|-------|-----|-------|------|-----|-----|-----|-----|--|---|------|------|--|-----|-----|-----|-----|-----|-----|-----|----|------|-------|--|-----|------|-----|-----|-----|------|--|----|------|-------|--|-----|------|------|-----|-----|------|-------|-------|------|-----|--|---------|------|------|------|------|------|--|--------|------|------|--|---------|-----|-----|-----|------|------|--|---------|------|------|--|---------|-----|------|------|------|------|--|-----|-----|------|----------|--|----|----|-----|----|-----|----------|--|----|----|
| 成<br>果<br>の<br>要<br>約   | <p>1. カンキツ専作経営における品種系統別作業労働は211.6～413.7時間／10 a の開差があり、労働集約度は極早生&gt;早生&gt;伊予柑&gt;普通の順である。作業別には、ミカンが収穫調整&gt;選別出荷&gt;摘果&gt;防除、伊予柑が収穫調整&gt;貯蔵管理&gt;選別出荷&gt;防除&gt;整枝せん定で、時期別ではいずれも10～12月に集中している。極早生は摘果、収穫調整、整枝せん定、防除等に労働力が多く投されているが、摘果、収穫の分割性や高接後の周到な管理によるものである。これらの品種系統、時期別の序列性は生産規模、園地条件等とともに、経営者の判断により異なる。</p> <p>2. 施設栽培の早生ミカンの作業労働は1,003時間／10 a で、時期別、作業別には8月下旬収穫・出荷労働が84時間／10 a のピークを形成している。</p> <p>3. マーコットは高接後1～4年で高接後の集約管理を反映して、労働係数としては未知数な部分が多い。</p> <p>4. 水稲、野菜との複合経営下におけるミカン部門の作業労働は184時間／10 a で、作業別には収穫調整&gt;選別出荷&gt;摘果&gt;防除&gt;中耕除草である。</p> |       |       |       |       |       |          |         |       |       |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
| カンキツ経営の労働係数   |  |       |       |       |       |       |          |         |       |       |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
| <table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="4">専 作</th> <th colspan="2">複 合</th> <th colspan="2">施設栽培</th> </tr> <tr> <th colspan="2"></th> <th>極早生</th> <th>早 生</th> <th>普 通</th> <th>伊予柑</th> <th>ミカン</th> <th colspan="2"></th> <th>マーコット</th> <th>早 生</th> </tr> </thead> <tbody> <tr> <td colspan="2">年 計</td> <td>413.7</td> <td>342.9</td> <td>211.6</td> <td>257.3</td> <td>184.0</td> <td colspan="2">年 計</td> <td>531.4</td> <td>100.3</td> </tr> <tr> <td>月 別</td> <td>10月</td> <td>128.6</td> <td>61.4</td> <td>1.7</td> <td>5.0</td> <td>10.0</td> <td>月 別</td> <td>2月</td> <td>154.7</td> <td>77.8</td> </tr> <tr> <td></td> <td>11</td> <td>0.6</td> <td>157.2</td> <td>26.3</td> <td>4.1</td> <td>27.8</td> <td></td> <td>3</td> <td>90.0</td> <td>31.9</td> </tr> <tr> <td></td> <td>12</td> <td>—</td> <td>—</td> <td>89.1</td> <td>95.0</td> <td>41.5</td> <td></td> <td>8</td> <td>10.0</td> <td>160.0</td> </tr> <tr> <td>作業別</td> <td>整枝せん定</td> <td>13.0</td> <td>3.1</td> <td>7.0</td> <td>8.0</td> <td>6.3</td> <td></td> <td>9</td> <td>14.7</td> <td>94.4</td> </tr> <tr> <td></td> <td>施 肥</td> <td>2.1</td> <td>4.2</td> <td>1.7</td> <td>4.0</td> <td>2.2</td> <td>作業別</td> <td>11</td> <td>22.7</td> <td>104.1</td> </tr> <tr> <td></td> <td>防 除</td> <td>15.9</td> <td>6.4</td> <td>8.0</td> <td>9.4</td> <td>10.6</td> <td></td> <td>12</td> <td>14.0</td> <td>195.9</td> </tr> <tr> <td></td> <td>摘 果</td> <td>26.2</td> <td>13.1</td> <td>8.6</td> <td>4.9</td> <td>11.2</td> <td>作業別割合</td> <td>温度水管理</td> <td>19.2</td> <td>6.0</td> </tr> <tr> <td></td> <td>収 穫 調 整</td> <td>19.1</td> <td>44.7</td> <td>39.6</td> <td>25.5</td> <td>29.9</td> <td></td> <td>ビニール被覆</td> <td>17.1</td> <td>17.7</td> </tr> <tr> <td></td> <td>貯 蔵 管 理</td> <td>4.8</td> <td>2.6</td> <td>1.9</td> <td>14.6</td> <td>16.8</td> <td></td> <td>収 穫 出 荷</td> <td>12.1</td> <td>25.8</td> </tr> <tr> <td></td> <td>選 別 出 荷</td> <td>7.2</td> <td>15.7</td> <td>24.6</td> <td>11.4</td> <td>10.3</td> <td></td> <td>摘 果</td> <td>4.0</td> <td>10.5</td> </tr> <tr> <td colspan="2">生産規模 (a)</td><td>31</td><td>56</td><td>121</td><td>16</td><td>162</td><td colspan="2" rowspan="3">生産規模 (a)</td><td>15</td><td>32</td></tr> </tbody> </table> |  |       |       |       |       |       |          |         |       |       | 専 作 |  |  |  | 複 合 |  | 施設栽培 |  |  |  | 極早生 | 早 生 | 普 通 | 伊予柑 | ミカン |  |  | マーコット | 早 生 | 年 計 |  | 413.7 | 342.9 | 211.6 | 257.3 | 184.0 | 年 計 |  | 531.4 | 100.3 | 月 別 | 10月 | 128.6 | 61.4 | 1.7 | 5.0 | 10.0 | 月 別 | 2月 | 154.7 | 77.8 |  | 11 | 0.6 | 157.2 | 26.3 | 4.1 | 27.8 |  | 3 | 90.0 | 31.9 |  | 12 | — | — | 89.1 | 95.0 | 41.5 |  | 8 | 10.0 | 160.0 | 作業別 | 整枝せん定 | 13.0 | 3.1 | 7.0 | 8.0 | 6.3 |  | 9 | 14.7 | 94.4 |  | 施 肥 | 2.1 | 4.2 | 1.7 | 4.0 | 2.2 | 作業別 | 11 | 22.7 | 104.1 |  | 防 除 | 15.9 | 6.4 | 8.0 | 9.4 | 10.6 |  | 12 | 14.0 | 195.9 |  | 摘 果 | 26.2 | 13.1 | 8.6 | 4.9 | 11.2 | 作業別割合 | 温度水管理 | 19.2 | 6.0 |  | 収 穫 調 整 | 19.1 | 44.7 | 39.6 | 25.5 | 29.9 |  | ビニール被覆 | 17.1 | 17.7 |  | 貯 蔵 管 理 | 4.8 | 2.6 | 1.9 | 14.6 | 16.8 |  | 収 穫 出 荷 | 12.1 | 25.8 |  | 選 別 出 荷 | 7.2 | 15.7 | 24.6 | 11.4 | 10.3 |  | 摘 果 | 4.0 | 10.5 | 生産規模 (a) |  | 31 | 56 | 121 | 16 | 162 | 生産規模 (a) |  | 15 | 32 |
|   |  | 専 作   |       |       |       | 複 合   |          | 施設栽培    |       |       |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|   |  | 極早生   | 早 生   | 普 通   | 伊予柑   | ミカン   |          |         | マーコット | 早 生   |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
| 年 計   |  | 413.7 | 342.9 | 211.6 | 257.3 | 184.0 | 年 計      |         | 531.4 | 100.3 |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
| 月 別   | 10月  | 128.6 | 61.4  | 1.7   | 5.0   | 10.0  | 月 別      | 2月      | 154.7 | 77.8  |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|   | 11   | 0.6   | 157.2 | 26.3  | 4.1   | 27.8  |          | 3       | 90.0  | 31.9  |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|   | 12   | —     | —     | 89.1  | 95.0  | 41.5  |          | 8       | 10.0  | 160.0 |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
| 作業別   | 整枝せん定  | 13.0  | 3.1   | 7.0   | 8.0   | 6.3   |          | 9       | 14.7  | 94.4  |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|   | 施 肥  | 2.1   | 4.2   | 1.7   | 4.0   | 2.2   | 作業別      | 11      | 22.7  | 104.1 |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|   | 防 除  | 15.9  | 6.4   | 8.0   | 9.4   | 10.6  |          | 12      | 14.0  | 195.9 |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|   | 摘 果  | 26.2  | 13.1  | 8.6   | 4.9   | 11.2  | 作業別割合    | 温度水管理   | 19.2  | 6.0   |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|   | 収 穫 調 整  | 19.1  | 44.7  | 39.6  | 25.5  | 29.9  |          | ビニール被覆  | 17.1  | 17.7  |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|   | 貯 蔵 管 理  | 4.8   | 2.6   | 1.9   | 14.6  | 16.8  |          | 収 穫 出 荷 | 12.1  | 25.8  |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
|   | 選 別 出 荷  | 7.2   | 15.7  | 24.6  | 11.4  | 10.3  |          | 摘 果     | 4.0   | 10.5  |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
| 生産規模 (a)  |  | 31    | 56    | 121   | 16    | 162   | 生産規模 (a) |         | 15    | 32    |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
| (長崎県総合農林試験場)  |  |       |       |       |       |       |          |         |       |       |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |
| 普及上の留意点   | カンキツ経営の設計に当たっては、技術係数の中の労働係数が重要な決定要因となり、経営組織等調査データの性格を十分に吟味して利用する必要がある。   |       |       |       |       |       |          |         |       |       |     |  |  |  |     |  |      |  |  |  |     |     |     |     |     |  |  |       |     |     |  |       |       |       |       |       |     |  |       |       |     |     |       |      |     |     |      |     |    |       |      |  |    |     |       |      |     |      |  |   |      |      |  |    |   |   |      |      |      |  |   |      |       |     |       |      |     |     |     |     |  |   |      |      |  |     |     |     |     |     |     |     |    |      |       |  |     |      |     |     |     |      |  |    |      |       |  |     |      |      |     |     |      |       |       |      |     |  |         |      |      |      |      |      |  |        |      |      |  |         |     |     |     |      |      |  |         |      |      |  |         |     |      |      |      |      |  |     |     |      |          |  |    |    |     |    |     |          |  |    |    |