Determination of Superior Turkish Eggplant (Solanum melongena L.) Genotypes by Pedigree Selection Method

Zuleyha CAKIR1 Ahmet BALKAYA1 Dilek KANDEMIR2 Seyma SARIBAS1*

1 Agriculture Faculty, Horticulture Department, Ondokuz Mayis University, Samsun, Turkey
2 Vocational High School of Samsun, Ondokuz Mayis University, Samsun, Turkey

* Corresponding author e-mail: seyma.saribas@omu.edu.tr

Citation:

ABSTRACT

Eggplant (Solanum melongena L.), belonging to the Solanaceae family, is widely grown in Turkey. It is also one of the important vegetable species in Turkey. Additionally, Turkey has valuable eggplant populations. This study was conducted to select valuable local eggplant genetic resources under the ecological conditions of Samsun province in 2016. In this study, 75 eggplant genotypes were detailed from different eco-geographical regions of Turkey. The weighted ranking method was also used to select superior eggplant genotypes with pedigree selection. It was determined that the total weighted ranking scores of eggplant genotypes studied was in the range of 290-475 point. According to the total weighted ranked scores, 20 promising eggplant genotypes with a score of 420 and above were determined for use in the variety breeding program. At the end of this research, the genotypes G30, G43, G49, G51 and G55 were determined to be superior for further breeding studies.

Keywords: Solanum melongena, genetic resources, selection, Turkey

Introduction

The genus Solanum shows a wide and rich genotypic variation with more than 1000 species (Fukuoka et al. 2010). The origins of eggplant (Solanum melongena L.) in the genus Solanum has been reported in the literature as India, Burma, and China (Küçük 2003; Daunay et al. 2001; Tümbilen, 2007). It was brought to the Mediterranean basin and then to Spain first by the Arabs. It was later spread by the Turkish people all over Europe through the Balkan countries (Cakir et al. 2017). It has been reported that eggplants first reached Anatolia in the late 16th and early 17th centuries (Kalloo, 1993; Vural et al. 2000).

Eggplant is an important vegetable crop in Turkey cultivated as a summer vegetable in the open field, while grown in the greenhouses in the winter and spring season. China (32,001,667 tons) and India (12,552,000 tons) are the leading eggplant producers in the World. Turkey is in the fourth place in production in the World with 854,049 tons (FAO, 2016). It is grown in almost every region in Turkey. The regions with the highest eggplant production in Turkey include the Mediterranean Region (406,675 tons), the Southeast Anatolia Region (101,527 tons) and the Aegean Region (98,151 tons) (TUIK, 2016).
Plant genetic resources have an important value and importance in terms of variety breeding studies since they contain the determined cultural plants and their wild relatives (Engels et al. 1995). In addition, local genetic resources, due to their adaptability to different ecologies, their resistance to diseases and pests, and the demanded quality attributes they possess, are unique sources of breeding activities. Plant breeders have achieved significant success in recent years to select or develop varieties with the desired traits in terms of adaptation, yield, quality, resistance to diseases and pests by utilizing the existing genetic diversity in Turkey. The detailed studies on the collection of local eggplant genetic resources, identification of plant characteristics are fewer compared to other Solanaceae species in Turkey (Çakır, 2018). This show the fact that eggplant breeding studies should be increased.

Turkey has very high phenotypic diversity and genotypic variability in many vegetable species such as eggplant of which it is not their gene centre (Karaağaç and Balkaya, 2017). Morphological variations are of great importance in variety breeding studies. Because, it is very important to know the existing variations in the cultivated species for plant breeding programs (Bliss, 1981).

Selection is the most important factor that changes the structure of a population. Selection reduces or increased some genotypes since it changes the gene frequency in a population. The effect of selection on measurable traits is examined by considering some quantitative parameters (Balkaya et al. 2011). Phenotypic diversity in eggplant populations is very high. The variations are mostly determined by fruit shape, fruit colour, fruit bitterness, fruit flesh thickness, fruit flesh colour, fruit size, prickliness, the number of seeds (Frary et al. 2005; Çakır, 2018).

Local eggplant genetic resources have been collected by many researchers from different geographic regions of Turkey (Filiz and Özçalabi, 1992; Pirinç, 1999; Tümbilen, 2007; Boyacı et al. 2010; Topçu, 2014). However, few studies had been conducted to determine the genotypes suitable for fresh consumption by selection breeding. Kaplan and Koludar (1986) were selected seven eggplant genotypes from local Şeyhkent eggplant population in Diyarbakır province. In another study, Surtepe 1, Surtepe 2, Mezra 5 and Keskince 3 namely eggplant genotypes were selected as suitable eggplant local varieties for fresh consumption from local Şanlıurfa eggplant populations (Pirinç, 1999). In the other selection study conducted on eggplant populations collected from Diyarbakır province, three eggplant genotypes were determined. Among these, the genotype Şeyhkent-3 was reported as eggplant genotype with the highest weighted ranking score (725 point) (Pirinç and Pakyürek, 2004). Boyacı et al. (2010) found that the average fruit weight of the local genotypes, grown with the name of ‘Göl Patlıcanı’ in Burdur province and it had different types, ranged from 110.3 g to 199.6 g.

The present study comprises the first start-up phase of the eggplant breeding studies for new developing varieties. Accordingly, the aim of this study was to determine the promising eggplant genotypes suitable for fresh consumption in eggplant populations collected from different regions in Turkey by pedigree selection method.

Materials and Methods

Materials: This study used a total of seventy five eggplant seeds collected from different regions of Turkey (Table 1). Forty accessions of the S. melongena populations were obtained from the USDA-ARS National Germplasm Bank, twenty accessions of the S. melongena populations were provided from the Turkish National Seed Gene Bank (AARI) and fifteen accessions of the S. melongena populations were collected by Prof. Dr. Ahmet Balkaya, of the Horticulture Department of the Faculty of Agriculture of Ondokuz Mayis University (Table 1). The genetic material consisted of landraces and local populations maintained by farmers for generations.

Growth conditions: The field component of this study was carried out in the Samsun province in 2016. The seeds of all populations were sown into plug trays containing peat and perlite (in the ratio 3:1) on April 16, 2016. After the field in which the trial was established was plowed, in the field, cultivation places were prepared. The cultivation places were mulched with mulch; drip irrigation system was set and made ready for seedling planting. Soil tests were carried out before planting. The soil of the experimental area was sandy loam with pH 6.5. Fifteen seedlings from each eggplant genotype was planted at the 4 to 5 true leaf stage at a spacing of 50x50 cm on May 20, 2016. Standard fertilization and weed control practices were applied.

Determination of eggplant genotypes suitable by pedigree selection method: The aim was to determine the eggplant genotypes suitable for fresh consumption with long-cylindrical smooth fruits with black or dark purple color and with little or no seeds in the selection breeding. Accordingly, pedigree selection method was used in variety breeding. The fruit and yield characteristics data were evaluated by the modified weighted ranked (WR) method (Çakır, 2018).
The WR method is a tool commonly used in statistical analyses. This method is known as “Tartılı derecelendirme” in Turkish and almost exclusively used in the studies with multivariate data generated in horticultural research (Balkaya and Yanmaz, 2005; Balkaya and Ergün, 2008). Class values of selection criteria, Class Scores (CS) and Relative Scores (RS) were assigned (Table 2). The total points of types were calculated by summing Class Scores (CS) and multiplied by Relative Scores (RS). Accordingly, genotypes that were above the average score were selected as the promising eggplant genotypes. Otherwise, eggplant genotypes were also classified according to the characteristics examined, and accordingly, the distribution frequencies of genotypes were shown in this study.

Results and Discussion

All local eggplant genotypes were evaluated according to the weighted ranking method. The results of the weighted rankings are given in Table 3. Examining Table 3, local eggplant genotypes were found to have a total score in the range of 290-475 points. Among all the genotypes, the genotype G51 (475 points) determined the highest score. This was followed by G30 (470 points), G43 (470 points), G55 (470 points) and G49 (465 points) genotypes. It was determined that the majority of the eggplant genotypes that received high scores had the highest scores in terms of all the characteristics of the selection. As a result of the evaluations, the lowest value as found in the G25 genotype with 290 points. According to the results of weighted rankings, it was found that 37 eggplant genotypes had a total score of Promising genotypes which found a score between 420 and 475 were selected for the second-year study.

In terms of average fruit length, it was found that 63 of the local eggplant genotypes had long, 8 genotype had medium-sized, and 4 genotype (G42, G62, G65, G60) had very long fruits (Table 3). According to the demands of consumers and producers, long eggplant fruits are preferred for fresh consumption in Turkey. In this study, in terms of frequency distribution, 84% of the local eggplant genotypes had long fruits which is important in terms of the selection of many eggplant genotypes suitable for fresh consumption. In another study carried out by Topçu (2014), of the 100 eggplant genotypes collected from different regions of Turkey, 32 had long fruit sized while 31 had medium-sized, 15 had short, 4 had oval, 8 had pear-like and 10 had round fruit shapes. The research results were shown similar with this literature.

The fruit diameters of the majority of eggplant genotypes varied between 50 mm and 100 mm. In terms of fruit diameter values, 65.3% of genotypes were found to be medium-sized and 26.7% were large sized (Table 3). In terms of fruit colours, the eggplants were divided into different groups as purple (20 genotypes), reddish (10 genotypes), black (16 genotypes), green (13 genotypes) and light purple/lilac (16 genotypes) (Table 3). Filiz and Özçalabı (1992) were mentioned that on the phonological, morphological and pomological characteristics of some local eggplant varieties in Turkey, fruit skin colour ranged from green and yellow to dark purple and black. These results showed that the eggplant gene pool is heterogeneous and the level of variation is high in terms of fruit shape and fruit colours.

The sepal size in eggplant fruits is a very important criterion in terms of storing ability (Çetinkaya et al. 2009). In terms of the sepal size, 32 of the eggplant genotypes were found to be medium-sized, 38 genotypes were small-sized and 5 genotypes (G5, G14, G15, G29, G50) were very small-sized (Table 3). In sepal, prickliness was either absent or almost absent in 51 eggplant genotypes. The selected genotypes G35, G43, G51, G52, G55 and G56 had no prickliness in their sepals. This trait is a desired trait for the development of new eggplant varieties by the breeders.

It was determined that there were great differences between the eggplant genotypes in terms of yield components. In addition to the role of multi-gene inheritance in yield, this explains the fact that the types are quite different from each other. Comparing the eggplant genotypes, it was determined that four genotypes (G18, G23, G27, G44) had average fruit weights less than 150 g. However, it was found that there were 59 genotypes with fruit weights in the range of 150-300 g and 12 genotypes with fruit weights higher than 300 g (Table 3). It was determined that difference between the lowest and the highest yield values were approximately two-fold. High yield are more preferred in eggplant cultivation. Of the selected eggplant genotypes, 53.3% had low yield per plant values, 38.6% had moderate yield per plant values and 8.1% had very high yield per plant values. The majority of the selected genotypes were found to be superior in terms of yield components. The other remain genotypes are considered to be evaluated in the other breeding studies. As a result, G30, G43, G49, G51 and G55 genotypes were found to have higher yield values than other genotypes (Table 4). These superior genotypes are planned to be re-evaluated in terms of yield components in different environmental conditions.
Conclusion
In this study, pedigree selection method was carried out in the eggplant population collected from different locations in Turkey. The evaluations were made according to the weighted ranking method. It was determined that the eggplant genotypes have a total score between 290 and 475 point. According to the selection scores, a total of 20 eggplant genotypes with a score of 420 point and above were selected for using in the eggplant variety breeding program. At the end of this study, G30, G43, G49, G51 and G55 determined as superior genotypes. It will be possible to evaluate the different frequency distributions of the fruit characteristics of the eggplant genotypes collected from different locations in Turkey according to their breeding purposes. In the future, these studies are planned to continue to obtain new hybrid eggplant varieties in Turkey. In addition, this study provides a general overview of the status of present in morphological variation at gene pools. Thus, detailed information on the morphological variability between local eggplant genotypes was obtained.
Table 1. Code, accession number and collected sites of *Solanum melongena* in Turkey.

<table>
<thead>
<tr>
<th>Code</th>
<th>Accession Number</th>
<th>Collected Sites</th>
<th>Code</th>
<th>Accession Number</th>
<th>Collected Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>PI 166994 01</td>
<td>Hatay/USDA</td>
<td>G39</td>
<td>PI 204630 01</td>
<td>Kayserei</td>
</tr>
<tr>
<td>G2</td>
<td>PI 167381 01</td>
<td>Adana/USDA</td>
<td>G40</td>
<td>PI 204731 01</td>
<td>Kayserei</td>
</tr>
<tr>
<td>G3</td>
<td>PI 169642 01</td>
<td>Aydın/USDA</td>
<td>G41</td>
<td>TR 61766</td>
<td>Muğla</td>
</tr>
<tr>
<td>G4</td>
<td>PI 169644 01</td>
<td>Muğla</td>
<td>G42</td>
<td>TR 55995</td>
<td>Trabzon</td>
</tr>
<tr>
<td>G5</td>
<td>PI 169649 01</td>
<td>İzmir</td>
<td>G43</td>
<td>TR 70757</td>
<td>Samsun</td>
</tr>
<tr>
<td>G6</td>
<td>PI 169658 01</td>
<td>Kırklareli</td>
<td>G44</td>
<td>TR 70758</td>
<td>Samsun</td>
</tr>
<tr>
<td>G7</td>
<td>PI 169667 01</td>
<td>Kocaeli</td>
<td>G45</td>
<td>TR 70756</td>
<td>Amasya</td>
</tr>
<tr>
<td>G8</td>
<td>PI 171850 01</td>
<td>Kastamonu</td>
<td>G46</td>
<td>TR 69835</td>
<td>Çorum</td>
</tr>
<tr>
<td>G9</td>
<td>PI 171851 01</td>
<td>Samsun</td>
<td>G47</td>
<td>TR 70768</td>
<td>Kastamonu</td>
</tr>
<tr>
<td>G10</td>
<td>PI 171853 01</td>
<td>Tokat</td>
<td>G48</td>
<td>TR 70767</td>
<td>Kastamonu</td>
</tr>
<tr>
<td>G11</td>
<td>PI 173104 01</td>
<td>Artvin</td>
<td>G49</td>
<td>TR 70766</td>
<td>Sinop</td>
</tr>
<tr>
<td>G12</td>
<td>PI 173106 01</td>
<td>Ağrı</td>
<td>G50</td>
<td>TR 68531</td>
<td>Bartın</td>
</tr>
<tr>
<td>G13</td>
<td>PI 173111 01</td>
<td>Kahramanmaraş</td>
<td>G51</td>
<td>TR 68532</td>
<td>Bartın</td>
</tr>
<tr>
<td>G14</td>
<td>PI 174359 01</td>
<td>Van</td>
<td>G52</td>
<td>TR 68528</td>
<td>Zonguldak</td>
</tr>
<tr>
<td>G15</td>
<td>PI 174360 01</td>
<td>Diyarbakır</td>
<td>G53</td>
<td>TR 55678</td>
<td>Giresun</td>
</tr>
<tr>
<td>G16</td>
<td>PI 174362 01</td>
<td>Mardin</td>
<td>G54</td>
<td>TR 77307</td>
<td>Edirne</td>
</tr>
<tr>
<td>G17</td>
<td>PI 174369 01</td>
<td>Gaziantep</td>
<td>G55</td>
<td>TR 69211</td>
<td>Antalya</td>
</tr>
<tr>
<td>G18</td>
<td>PI 174371 01</td>
<td>Gaziantep</td>
<td>G56</td>
<td>TR 75349</td>
<td>Artvin</td>
</tr>
<tr>
<td>G19</td>
<td>PI 174373 01</td>
<td>Malatya</td>
<td>G57</td>
<td>TR 70764</td>
<td>Sinop</td>
</tr>
<tr>
<td>G20</td>
<td>PI 174374 01</td>
<td>Elazığ</td>
<td>G58</td>
<td>TR 70765</td>
<td>Sinop</td>
</tr>
<tr>
<td>G21</td>
<td>PI 175909 01</td>
<td>Balıkesir</td>
<td>G59</td>
<td>TR 75345</td>
<td>Artvin</td>
</tr>
<tr>
<td>G22</td>
<td>PI 175913 01</td>
<td>Çorum</td>
<td>G60</td>
<td>TR 70759</td>
<td>Samsun</td>
</tr>
<tr>
<td>G23</td>
<td>PI 175914 01</td>
<td>Yozgat</td>
<td>G61</td>
<td>OMU-ZF/BAH</td>
<td>Aydın</td>
</tr>
<tr>
<td>G24</td>
<td>PI 175916 01</td>
<td>Kayseri</td>
<td>G62</td>
<td>OMU-ZF/BAH</td>
<td>Aydın</td>
</tr>
<tr>
<td>G25</td>
<td>PI 176758 01</td>
<td>Niğde</td>
<td>G63</td>
<td>OMU-ZF/BAH</td>
<td>Manisa, Salihli</td>
</tr>
<tr>
<td>G26</td>
<td>PI 176760 01</td>
<td>Konya</td>
<td>G64</td>
<td>OMU-ZF/BAH</td>
<td>Aydın, İncirlioja</td>
</tr>
<tr>
<td>G27</td>
<td>PI 176761 01</td>
<td>Konya</td>
<td>G65</td>
<td>OMU-ZF/BAH</td>
<td>Aydın</td>
</tr>
<tr>
<td>G28</td>
<td>PI 176762 01</td>
<td>Bilecik</td>
<td>G66</td>
<td>OMU-ZF/BAH</td>
<td>Kemer</td>
</tr>
<tr>
<td>G29</td>
<td>PI 176763 01</td>
<td>Eskişehir</td>
<td>G67</td>
<td>OMU-ZF/BAH</td>
<td>İzmir, Bayındır</td>
</tr>
<tr>
<td>G30</td>
<td>PI 177073 01</td>
<td>Çanakkale</td>
<td>G68</td>
<td>OMU-ZF/BAH</td>
<td>Aydın</td>
</tr>
<tr>
<td>G31</td>
<td>PI 177074 01</td>
<td>Kayseri</td>
<td>G69</td>
<td>OMU-ZF/BAH</td>
<td>Diyarbakır</td>
</tr>
<tr>
<td>G32</td>
<td>PI 177076 01</td>
<td>Konya</td>
<td>G70</td>
<td>OMU-ZF/BAH</td>
<td>Hatay,Samandağ</td>
</tr>
<tr>
<td>G33</td>
<td>PI 179045 01</td>
<td>Tekirdağ</td>
<td>G71</td>
<td>OMU-ZF/BAH</td>
<td>Aydın, Nazilli</td>
</tr>
<tr>
<td>G34</td>
<td>PI 179496 01</td>
<td>Bursa</td>
<td>G72</td>
<td>OMU-ZF/BAH</td>
<td>Şanlıurfa, Birecik</td>
</tr>
<tr>
<td>G35</td>
<td>PI 179498 01</td>
<td>İstanbul</td>
<td>G73</td>
<td>OMU-ZF/BAH</td>
<td>Mersin, Mut</td>
</tr>
<tr>
<td>G36</td>
<td>PI 182299 01</td>
<td>Muş</td>
<td>G74</td>
<td>OMU-ZF/BAH</td>
<td>Bursa</td>
</tr>
<tr>
<td>G37</td>
<td>PI 182300 01</td>
<td>Kahramanmaraş</td>
<td>G75</td>
<td>OMU-ZF/BAH</td>
<td>Mersin, Mut</td>
</tr>
<tr>
<td>G38</td>
<td>PI 183718 01</td>
<td>Kahramanmaraş</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 2. Weighted Ranking criteria examined in pedigree selection of eggplant genotypes.

<table>
<thead>
<tr>
<th>Selection Criteria</th>
<th>Classes</th>
<th>Class Score (CS)</th>
<th>Relative Score (RS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit length (cm)</td>
<td>very short (&lt;10 cm)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>short (11-15 cm)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>intermediate (16-20 cm)</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>long (21-25 cm)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>very long (&gt;26 cm)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>very small (&lt;10 mm)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>small (11-30 mm)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fruit diameter (mm)</td>
<td>intermediate (31-50 mm)</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>large (51-100 mm)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>very large (&gt;100 mm)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fruit colour</td>
<td>white</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>black</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>purple</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>reddish</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>light purple/lilac</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>green</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fruit colour homogeneity</td>
<td>homogeneous</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mottled</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>striped</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fruit colour tones</td>
<td>light</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>intermediate</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dark</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>very small</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>small</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Size of the calyx</td>
<td>intermediate</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>large</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>very large</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Maturing period (day)</td>
<td>early (&lt;60)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mid-season (60-75)</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>late season (&gt;75)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Seed number per fruit (unit)</td>
<td>No seed</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Little</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>More</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weak</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Prickliness</td>
<td>Intermediate</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Powerful</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very powerful</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Average fruit weight (g/plant)</td>
<td>&lt;150 g</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>150-300 g</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>&gt;300 g</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total yield per plant (g/plant)</td>
<td>Little&lt;480</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intermediate 480-945</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Much&gt;945</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
Table 3. Frequency distribution of the fruit characteristics examined in the eggplant genotypes.

<table>
<thead>
<tr>
<th>Traits</th>
<th>Class ranges</th>
<th>Frequency ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit length (cm)</td>
<td>intermediate</td>
<td>10.7</td>
</tr>
<tr>
<td></td>
<td>long</td>
<td>84.0</td>
</tr>
<tr>
<td></td>
<td>very long</td>
<td>5.3</td>
</tr>
<tr>
<td>Fruit diameter (mm)</td>
<td>small</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>intermediate</td>
<td>65.3</td>
</tr>
<tr>
<td></td>
<td>big</td>
<td>26.7</td>
</tr>
<tr>
<td>Fruit colour</td>
<td>purple</td>
<td>26.7</td>
</tr>
<tr>
<td></td>
<td>reddish</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>black</td>
<td>21.3</td>
</tr>
<tr>
<td></td>
<td>light purple/lilac</td>
<td>21.3</td>
</tr>
<tr>
<td></td>
<td>green</td>
<td>17.4</td>
</tr>
<tr>
<td>Fruit colour homogeneity</td>
<td>homogeneous</td>
<td>64.0</td>
</tr>
<tr>
<td></td>
<td>mottled</td>
<td>34.7</td>
</tr>
<tr>
<td></td>
<td>striped</td>
<td>1.3</td>
</tr>
<tr>
<td>Fruit colour tones</td>
<td>dark</td>
<td>52.0</td>
</tr>
<tr>
<td></td>
<td>intermediate</td>
<td>26.7</td>
</tr>
<tr>
<td></td>
<td>light</td>
<td>21.3</td>
</tr>
<tr>
<td>Size of the calyx</td>
<td>very small</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>small</td>
<td>50.7</td>
</tr>
<tr>
<td></td>
<td>intermediate</td>
<td>42.6</td>
</tr>
<tr>
<td>Maturing period (day)</td>
<td>early</td>
<td>26.7</td>
</tr>
<tr>
<td></td>
<td>mid-season</td>
<td>42.7</td>
</tr>
<tr>
<td></td>
<td>late season</td>
<td>30.6</td>
</tr>
<tr>
<td>Seed number per fruit (unit)</td>
<td>little</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>more</td>
<td>80.0</td>
</tr>
<tr>
<td>Prickliness</td>
<td>none or less</td>
<td>68.0</td>
</tr>
<tr>
<td></td>
<td>little</td>
<td>21.3</td>
</tr>
<tr>
<td></td>
<td>intermediate</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>powerful</td>
<td>4.0</td>
</tr>
<tr>
<td>Average fruit weight (g/plant)</td>
<td>&lt;150 g</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>150-300 g</td>
<td>78.7</td>
</tr>
<tr>
<td></td>
<td>&gt;300 g</td>
<td>16.0</td>
</tr>
<tr>
<td>Total yield per plant (g/plant)</td>
<td>little</td>
<td>53.3</td>
</tr>
<tr>
<td></td>
<td>intermediate</td>
<td>38.7</td>
</tr>
<tr>
<td></td>
<td>much</td>
<td>8.0</td>
</tr>
</tbody>
</table>
Table 4. The total score of eggplant genotypes with relative scores x class scores for each trait.

<table>
<thead>
<tr>
<th>Genotype</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>60</td>
<td>40</td>
<td>345</td>
</tr>
<tr>
<td>G2</td>
<td>50</td>
<td>30</td>
<td>5</td>
<td>15</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>60</td>
<td>80</td>
<td>355</td>
</tr>
<tr>
<td>G3</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>25</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>60</td>
<td>80</td>
<td>415</td>
</tr>
<tr>
<td>G4</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>40</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>440</td>
</tr>
<tr>
<td>G5</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>5</td>
<td>40</td>
<td>50</td>
<td>25</td>
<td>60</td>
<td>100</td>
<td>415</td>
</tr>
<tr>
<td>G6</td>
<td>50</td>
<td>40</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>20</td>
<td>75</td>
<td>80</td>
<td>415</td>
</tr>
<tr>
<td>G7</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>15</td>
<td>15</td>
<td>25</td>
<td>50</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>80</td>
<td>430</td>
</tr>
<tr>
<td>G8</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>80</td>
<td>445</td>
</tr>
<tr>
<td>G9</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>15</td>
<td>15</td>
<td>40</td>
<td>30</td>
<td>15</td>
<td>75</td>
<td>40</td>
<td>370</td>
</tr>
<tr>
<td>G10</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>385</td>
</tr>
<tr>
<td>G11</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>5</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>340</td>
</tr>
<tr>
<td>G12</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>400</td>
</tr>
<tr>
<td>G13</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>60</td>
<td>80</td>
<td>405</td>
</tr>
<tr>
<td>G14</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>5</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>350</td>
<td></td>
</tr>
<tr>
<td>G15</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>5</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>370</td>
</tr>
<tr>
<td>G16</td>
<td>50</td>
<td>30</td>
<td>5</td>
<td>25</td>
<td>15</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>400</td>
</tr>
<tr>
<td>G17</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>15</td>
<td>5</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>345</td>
</tr>
<tr>
<td>G18</td>
<td>40</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>5</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>10</td>
<td>30</td>
<td>40</td>
<td>315</td>
</tr>
<tr>
<td>G19</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>20</td>
<td>50</td>
<td>20</td>
<td>75</td>
<td>40</td>
<td>375</td>
</tr>
<tr>
<td>G20</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>400</td>
</tr>
<tr>
<td>G21</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>15</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>435</td>
</tr>
<tr>
<td>G22</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>5</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>355</td>
</tr>
<tr>
<td>G23</td>
<td>50</td>
<td>50</td>
<td>5</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>290</td>
</tr>
<tr>
<td>G24</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>40</td>
<td>365</td>
</tr>
<tr>
<td>G25</td>
<td>40</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>5</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>40</td>
<td>370</td>
</tr>
<tr>
<td>G26</td>
<td>40</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>30</td>
<td>10</td>
<td>75</td>
<td>60</td>
<td>415</td>
</tr>
<tr>
<td>G27</td>
<td>40</td>
<td>50</td>
<td>5</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>30</td>
<td>40</td>
<td>305</td>
</tr>
</tbody>
</table>
### Continuing table 4

<table>
<thead>
<tr>
<th>Genotype</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>G28</td>
<td>50</td>
<td>50</td>
<td>5</td>
<td>15</td>
<td>5</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>400</td>
</tr>
<tr>
<td>G29</td>
<td>50</td>
<td>30</td>
<td>5</td>
<td>15</td>
<td>25</td>
<td>5</td>
<td>40</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>380</td>
</tr>
<tr>
<td>G30</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>40</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td>470</td>
</tr>
<tr>
<td>G31</td>
<td>40</td>
<td>30</td>
<td>5</td>
<td>15</td>
<td>5</td>
<td>15</td>
<td>40</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>360</td>
</tr>
<tr>
<td>G32</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>10</td>
<td>75</td>
<td>80</td>
<td>410</td>
</tr>
<tr>
<td>G33</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>40</td>
<td>375</td>
</tr>
<tr>
<td>G34</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>25</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>50</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>370</td>
</tr>
<tr>
<td>G35</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>40</td>
<td>30</td>
<td>25</td>
<td>60</td>
<td>100</td>
<td>425</td>
</tr>
<tr>
<td>G36</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>445</td>
</tr>
<tr>
<td>G37</td>
<td>50</td>
<td>30</td>
<td>5</td>
<td>25</td>
<td>5</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>75</td>
<td>80</td>
<td>380</td>
</tr>
<tr>
<td>G38</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>5</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>410</td>
</tr>
<tr>
<td>G39</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>15</td>
<td>25</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>20</td>
<td>60</td>
<td>80</td>
<td>400</td>
</tr>
<tr>
<td>G40</td>
<td>40</td>
<td>50</td>
<td>15</td>
<td>15</td>
<td>25</td>
<td>10</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>415</td>
</tr>
<tr>
<td>G41</td>
<td>50</td>
<td>20</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>25</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>360</td>
</tr>
<tr>
<td>G42</td>
<td>30</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>390</td>
</tr>
<tr>
<td>G43</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>40</td>
<td>50</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>470</td>
</tr>
<tr>
<td>G44</td>
<td>50</td>
<td>20</td>
<td>5</td>
<td>15</td>
<td>5</td>
<td>15</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>30</td>
<td>40</td>
<td>305</td>
</tr>
<tr>
<td>G45</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>15</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>395</td>
</tr>
<tr>
<td>G46</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>60</td>
<td>40</td>
<td>335</td>
</tr>
<tr>
<td>G47</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>385</td>
</tr>
<tr>
<td>G48</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>15</td>
<td>25</td>
<td>40</td>
<td>30</td>
<td>15</td>
<td>75</td>
<td>80</td>
<td>425</td>
</tr>
<tr>
<td>G49</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>100</td>
<td>465</td>
</tr>
<tr>
<td>G50</td>
<td>50</td>
<td>50</td>
<td>5</td>
<td>15</td>
<td>5</td>
<td>5</td>
<td>50</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>40</td>
<td>345</td>
</tr>
<tr>
<td>G51</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>100</td>
<td>475</td>
</tr>
</tbody>
</table>
Continuing table 4

<table>
<thead>
<tr>
<th>Genotype</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>G52</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>15</td>
<td>5</td>
<td>15</td>
<td>40</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td>425</td>
</tr>
<tr>
<td>G53</td>
<td>50</td>
<td>20</td>
<td>20</td>
<td>15</td>
<td>5</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>345</td>
</tr>
<tr>
<td>G54</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>10</td>
<td>15</td>
<td>25</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>80</td>
<td>415</td>
</tr>
<tr>
<td>G55</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>40</td>
<td>50</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>470</td>
</tr>
<tr>
<td>G56</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>40</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>80</td>
<td>450</td>
</tr>
<tr>
<td>G57</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>430</td>
</tr>
<tr>
<td>G58</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>420</td>
</tr>
<tr>
<td>G59</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>420</td>
</tr>
<tr>
<td>G60</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>40</td>
<td>50</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>430</td>
</tr>
<tr>
<td>G61</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>20</td>
<td>50</td>
<td>20</td>
<td>60</td>
<td>80</td>
<td>365</td>
</tr>
<tr>
<td>G62</td>
<td>30</td>
<td>20</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>370</td>
</tr>
<tr>
<td>G63</td>
<td>50</td>
<td>50</td>
<td>5</td>
<td>15</td>
<td>5</td>
<td>25</td>
<td>20</td>
<td>50</td>
<td>20</td>
<td>75</td>
<td>40</td>
<td>355</td>
</tr>
<tr>
<td>G64</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td>50</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>440</td>
</tr>
<tr>
<td>G65</td>
<td>30</td>
<td>20</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>340</td>
</tr>
<tr>
<td>G66</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>80</td>
<td>425</td>
</tr>
<tr>
<td>G67</td>
<td>40</td>
<td>30</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>75</td>
<td>80</td>
<td>410</td>
</tr>
<tr>
<td>G68</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>20</td>
<td>50</td>
<td>25</td>
<td>60</td>
<td>40</td>
<td>335</td>
</tr>
<tr>
<td>G69</td>
<td>30</td>
<td>20</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>20</td>
<td>50</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>350</td>
</tr>
<tr>
<td>G70</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>370</td>
</tr>
<tr>
<td>G71</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>20</td>
<td>50</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>405</td>
</tr>
<tr>
<td>G72</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>60</td>
<td>80</td>
<td>385</td>
</tr>
<tr>
<td>G73</td>
<td>50</td>
<td>30</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>25</td>
<td>60</td>
<td>80</td>
<td>405</td>
</tr>
<tr>
<td>G74</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>15</td>
<td>5</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>75</td>
<td>40</td>
<td>340</td>
</tr>
<tr>
<td>G75</td>
<td>50</td>
<td>50</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>30</td>
<td>20</td>
<td>75</td>
<td>40</td>
<td>355</td>
</tr>
</tbody>
</table>

References


