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Original Research Paper

Characterization and Morphological Typology Of Fig Variety (*Ficus carica*) In The Tlemcen Region

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The purpose of this study is to describe morpho-biometric and identify fig varieties in Tlemcen region, based on 33 morphological markers (24 qualitative and 9 quantitative traits). The samples collected are processed by the ImageJ software for taking measurements. The statistical analysis was carried out using the SAS version 9 software. The results of the descriptive analysis of morphological traits studied allowed us to describe each variety and estimated the variability associated with each character of the different varieties sampled. The results of the principal Component Analysis (PCA) allowed the distinction of nine groups. Comparison of the data collected for each two-to-two variety and the estimate of the square distance between them showed that there is a highly significant difference between all local varieties. Then the comparison between local varieties and imports allowed the population to be separated into 16 distinct groups. Statistical analysis identified skin color as the primary discriminating factor between local varieties followed by fruit length, apical branching and leaf count per shoot. Statistical analysis of qualitative and quantitative morphological data from the 33 characters in study is to be effective for the distinction of new local varieties. That said, morpho-biometric description and local variety identification must be verified by the molecular tool to embark on an effective program of management and genetic improvement of this important biological resource.

Keywords: Fig (Ficus carica), local varieties, morpho-biometric identification, Tlemcen, Algeria.

Introduction

The fig (*Ficus carica L.*) belongs to the Moraceae family. As one of the first domesticated crops, it is mainly planted in Mediterranean countries (Kislev et al, 2006) cited by Jing, 2020. This fruit tree is widespread in the countries of the Mediterranean basin since it is well adapted to different soils and climate (Mars, M., 2003) quoted by Ciarmiello et al. 2015. The center of origin of the fig has not been clearly established. However, a recent molecular analysis suggests that the center of origin is present-day Turkey (Karandeniz, 2009). The genus Ficus is distributed mainly in warm and temperate climates and consists of approximately 881 species (Kumar et al., 2011). Man's interest in fig trees has led to its dispersal in several parts of the world (Mauri, 1939). Fig fruits and derived products are used as an advantageous rich source of bioactive compounds of high economic value because of its use in cosmetic, pharmaceutical and agriculture industries (Amessis-Ouchemoukha, Et al, 2016). According to Barolo MI 2014, the fig is becoming increasingly popular for its edible value and medicinal properties. According to data from FAOSTAT (2018), world production of figs is about 1,135,316 tons of which Algeria ranks fourth in the world with 118,949 tons in 2018. The fig tree is one of Algeria's three main fruit productions. The vast majority of plantations are in Kabylie (Chouaki, et al. 2006). There are two forms, one wild: the caprifig, and the other cultivated.

The latter occupies an area of 39,356 Ha (FAOSTAT 2018). According to Chouaki, et al. 2006, local fig cultivars are preserved on family farms in mountain areas. However, among the main factors of genetic erosion are the abandonment of orchards urbanization, fires, aging of trees and the scarcity, even the absence of new plantations especially since the eighties. Added to this are the environmental, technical, economic and organizational constraints facing fig cultivation.

When harvesting figs, there is an apparent difference in fruit quality. Indeed, the ripening period of the fruit is staggered over time and gives rise to differences in fruit size, shape and color. Smaili and Kessai 2016) reported, that lower quality figs are used mainly as livestock feed. There is a growing industry to diversify the uses and enhance values of fig fruit (jam, coffee, paste, ingredients, etc.). The genetic improvement is becoming an important area of research to have better crops, and prior collection of information with regard to its genetic diversity necessary. The conservation of local resources also requires rational management, and such management requires prior knowledge of genetic diversity. The evaluation of the fig germplasm could be optimized using genetic markers; of morphological, biochemical (isozymes, proteins) and/or molecular types.

According to Bachi, 2012, the same genotype may encompass several phenotypes. This disparity may, result in synonymy problems. There are also fig appellations that differ from one locality to another within the same region, referring to the same cultivar. On the other hand, the homonymy may be the result of the presence of morphological similarities between individuals belonging to different genotypes, subject to the same environmental conditions. These similarities are the result of adaptive convergence in a given environment. Some fig cultivars have similar appellations.

Morphological characterization is still essential in any program of conservation and use of genetic resources (GIRALDO et al. 2008) and can largely address the problems of synonym and homonymy. Our work was focused on a morphometric description and identification of local fig varieties existing in the Tlemcen region, north-west Algeria. The purpose of morphological characterization is to characterize and compare the vegetative, and reproductive organ of different varieties studied, using the quantitative and qualitative morphological markers reported in IPGRI and CIHEAM 2003).

Material and methods

Selecting plant Material

The prospections were carried out, on a region of 500 km2 in the region of Tlemcen, which is located at the level of Western Orania of Algeria. Fifty on-site trips took place in different agro-ecological regions: coastal, steppe and mountain. (Figure 1)



Figure 1: Geographical localization of the study zones (sampling places in red)

The collection of plant material was carried out in the regions aroused, for morphological characterization on the basis of IPGRI and CIHEAM (2003), discriptors and, according to the varietal catalogue of Gonz-Lez-Rodr-Guez and Grajal-Mart-N (2011). Thirty-three morphological markers (qualitative and quantitative) related to the tree, fruit and leaves were selected for this study. These morphological markers have been used by several previous authors (Cabritaa Et Al., 2000, Khadari Et Al., 2001; Papadopoulou Et Al., 2002; Giraldo Et Al., 2005; Guasmi Et Al., 2006; Ikegami Et Al., 2008; Achtak, Et Al., 2009; Akbulut Et Al., 2009; Baraket Et Al., 2010; Chatti Et Al., 2010; Giraldo Et Al., 2010; Saddoud Et Al., 2011; Gaaliche Et Al., 2012; Perez-Jimez Et Al., 2012; Garcia Ruiz Et Al 2013; Ciarmiello F. 2015; And Ben Abdelkrim 2015 (Table 1).

The study was conducted on adult individuals who have approximately the same age and sampled randomly. Attempts were made to eliminate the effect of exposure by taking samples from all cardinal points: north, south, east and west, as well as inside the tree, during the summer period (June, July, August and September) of 2017.

In total, thirty-nine fig tree belonging to nine common cultivars (uniferous and biferous) were sampled; with repeats for each cultivar for morpho-biometric characterization.

The local cultivars studied are BAKOR, KAHLA, HAMRA, BEYDA, CHETOUI, ASSAL, BOUAFASSE, ONKE HEMMAM, HAFER ELJEMAL. Some so-called introduced varieties, according to the fig-farmer of the region Zeriki (imp06DJ), Spanish Chetoui (imp04DJ, IMP XY SS and imp XX SS), SpanishBayda (imp02BS), Khadra Baraniya (imp YZTHR) and Chetoui Spanish Brunette (impYZ). were included in this study for comparison to local cultivars (table 1)

	I
Variety name	Origin of Sampless
BAKOR	Chouli - Nedroma
KAHLA	Chouli
HAMRA	Chouli- Benissnous
BEYDA	Maghnia - Chouli
CHETOUI	Chouli- Djebala- Maghnia
ASSAL	Djebala
BOUAFAS	Maghnia Nedroma
ONKE HEMMAM	Maghnia Nedroma
HAFER ELJEMAL	Benisswe
ZERIKI (IMP 06DJ)	Nedroma
SPANISH CHETOUI (IMP04DJ, IMP XY SS AND IMP XX SS)	Maghnia
BAYDA ESPAGNOL (IMP 02BS)	Benisswe
KHADRA BARANIYA(FYZ THR IMP)	Nedroma
SPANISH BRUNETTE (IMP YYSS)	Maghnia

Table 1: Name of the varieties studied, and geographical origin of the collected samples.

In order to accomplish this study, measurements were made for morphometric characterization on three levels: tree, leaf and fruit. (**Table 1, Table 2**). In total, morphological characterization was carried out on 39 trees, 645 leaves and 898 fruits. Samples taken were photographed to identify and measure the different dimensions and surface using imageJ software (National Institutes of Health 1987). The fruit weight was measured using an electric balance with an accuracy of 1 g.

Statistical analyses

Data from the samples collected were used for statistical analyses using SAS version 9 software. The meaning was chosen for a value of p - 0.05. In order to properly describe the different morphometric parameters of the sampled fig trees, the arithmetic average (M) and the standard deviation the minimum (Min) and maximum (Max) values, were calculated. using the MEANS procedure. The principal component analysis (PCA) of the values of the measurements of morphometric traits studied, was carried out using the CANDISC procedure, in order to separate the populations of fig trees statistically. In addition to detect the similarities and morphological

differences between these varieties were compared by pairs. Procedure STEPDISC was used to look for factors that discriminate the different fig varieties.

Table 2: Qualitative of	characters and abbreviations
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Character	Abbreviation
Tr	ee
Shape of the tree	FORMPL
Tree vigour	Hpl
Apical Branch	BRAPPL
Ramification level	NVRMPL
Color of branches	CLBRPL
Number of leaves per shoot	NFTRPL
Le	af
Leaf Shape	FORMF
Number of lobes	NLOBF
shape of lobe	FLOBF
Shape of Leaf base	FBASF
Dentition of the edges of the Leaf	DTLMRGE
Leaf nervation	VntF
Color leaves	Clf
Petiole color	CLPTLF
Fr	uit
Ostiole color	CLOST
Shape of peduncle	FRMTGFR
Easy of peeling	FACEPFR
Fruit Skin cracks	CRPOFR
Firmness of the fruit skin	FRMPOFR
Skin color	CLPOFR
Number of lenticels	LNTFR
Color of lenticel	CLNTFR
Fruit flavor	SCRFR
Shape of the fruit	FORMFR

Table 3: Quantitative characters and abbreviations

Character	Abbreviation	
Lec	aves	
Length of Leaf	LONGF	
Length of petiole	PTLF	
Leaf width	LARGF	
Fi	ruit	
Length of fruit	LGFR	
Fruit width	LRFR	
Fruit pulpit surface	SURFCHRF	
Surface cavity of the fruit	ONCVFR	
Ostiole surface of fruit	OSFR	
Weight of the fruit	POIFR	

Results and Discussion

Descriptive analysis

The study of 33 morphological traits (24 qualitative and nine quantitative) allowed us to describe all studied cultivars and varieties, and the estimate of variability associated with each character, for the different varieties sampled.

for the nine quantitative measures arithmetic average, standard deviation minimum and maximum values were calculated, for each studied variety (Table 4). The twenty-four qualitative characters studied are presented with the percentage of representation per variety (Table 5). The variability between populations was significant despite the common geographical origin of the cultivars studying.

Similar previous descriptive studies were carried out using qualitative and quantitative morphological

markers, on Tunisian varieties (Gaaliche et al 2012, Ben Abdelkrim 2015) and Moroccan varieties (Oukabli 2005). The results of the work on Tunisian varieties for quantitative traits were superior to ours. On the other hand, a significant similarity existed between our results and those of Moroccans which may be due to the environmental effect and geographical proximity.

On the other hand, in terms of the results of qualitative pomological traits, the description of Mexicanes varieties (Garcia Ruiz et al., 2013) was similar to some of our varieties studied (Onk Hemam Tetela, Bouafasse Neza/Salvateirra, Chetoui Spanish brunette, Tecàmac, Zeriki Zacapaia). This result may be due to the great influence of Spanish varieties on our genetic resource and of course indirectly that of Mexico.

Principal Component Analysis (PCA)

The principal component analysis (PCA) of the values of morphometric measurements is presented in **figure 2.** This PCA separated the populations of local fig trees studied into nine distinct groups. The graphic interpretation of the PCA results is carried out primarily on the basis of Plan 1-2 because it provides the maximum amount of information with 60.93 contribution to the total variation (37.6 contribution for axis 1 and 23.33 for axis 2).



Figure 2: Projection of the average points of local fig varieties on the first factor of a principal component analysis. (*Pink Circle: Onk Hemam; Yellow Circle: Bouafasse; Dark Blue Circle: Bakor; Red Circle: Kahla; Green Circle: Hamra; Orange Circle: Assal; Violet Circle: Chetoui; Clear Blue Circle: Bayda; Brown Circle: Hafer Ejemal*)

Table 5 represents probabilities, statistical F values and square distances between the varieties studied (two-to-two comparison)

The difference is very highly significant between all local varieties (two-to-two comparison). The value of the highest square distance is observed between the two varieties Bakor and Hafer ejemal, with D^2 equal to 130.30. These results indicate that Bakor and Hafer ejemal are considered to be the two most morphologically and probably genetically distant local varieties since the environment in which these two varieties evolve belongs to the same bioclimatic stage Nedroma for the Bakor variety and Benissnous for the Hafer ejemal variety. Square distance values (D^2) less than 50 indicate that overlaps exist between varieties. The value of the lowest square distance is noted between the two varieties Kahla and Hamra, with D^2 equal to 7.11. These results indicate that Kahla and Hamra are considered to be the two most morphologically similar local varieties and probably also genetically for the same reason mentioned above for the Bakor and Hafer ejemal varieties. These results are of paramount importance in a management and/or breeding program because it will give us a fairly

precise idea of which variety to guide the crosses and what varieties can be mixed in the event of a decision to reduce the number of varieties for better management.

To see if variety importation is warranted, a principal component analysis (PCA) of the values of the morpho-metric character measurements presented in **Figure 3** was used in conjunction with measurements obtained from imported varieties. This PCA separated the populations of fig trees studied, local and imported into 16 distinct groups. The graphic interpretation of the PCA results is carried out primarily on the basis of Plan 1-2 because it provides the maximum amount of information with 46.54 contribution to the total variation (24.31 % contribution for axis 1 and 22.22 % for axis 2).

Table 6 represents square distances (D^2) between local and imported varieties (two-to-two comparison). The difference is very highly significant between all varieties, local and imported, (P<.0.0001).

The most morphologically distant imported variety of local varieties is Khadra Baraniya (imported 01 FYZ THR). This variety is unlike any local variety. For the rest of the imported varieties, we found overlaps between the populations of these and the populations of the local varieties, which means that overall, these imports, should not take place (globally), except for the Khadra Baraniya variety. The value of the lowest square distance was observed between the imported varieties; Bayda espaniol (imported 02 BS)" and the local beyda variety (D²- 11.73). These results indicate that the imported bayda espaniol variety can be replaced by the local Beyda variety (D²- 11.73) at farmers' loan. It is also probably that it is the same variety but with two different names.

			1	Squared dist	ance to varie	ty			
Variétés	Assal	Bakor	Beyda	Hamra	Bouafasse	Chetoui	Hafer	Kahla	Onke
							Eljemel		Hemmam
Assal	0	61.71013	39.67962	34.59043	51.55591	24.55477	69.16508	40.39089	85.06867
Bakor		0	72.47063	45.01153	42.51026	2.72344	130.30685	45.38127	77.93593
Beyda			0	41.76090	44.57321	23.01410	34.26934	38.55809	40.24521
Hamra				0	30.76339	42.83027	88.99568	7.11357	60.13779
Bouafasse					0	60.53916	73.39687	25.58668	40.83381
Chetoui						0	38.12368	47.60508	58.86821
Hafer Eljeme	el l						0	81.69130	56.66060
Kahla								0	60.83242
Onke Hemma	am								0
-		F St	tatistics, NDF	=33, DDF=42	0 for squared	l distance to va	riety		
Variétés A	Assal	Bakor	Beyda	Hamra	Bouafasse	Chetoui	Hafer	Kahla	Onke
							Eljemel		Hemmam
Assal	0	39.34855	34.67986	24.75072	38.45622	21.07671	13.56987	38.05997	45.19394
Bakor		0	51.87145	27.27139	26.67579	51.28702	24.35684	34.53163	36.49962
Beyda			0	34.05223	38.11422	23.15666	6.95714	43.32037	23.51970
Hamra				0	21.62100	34.34037	17.18340	6.22113	30.61209
Bouafasse					0	50.85982	14.32902	23.54881	21.40589
Chetoui						0	7.70700	52.26054	33.98902
Hafer Eljeme	:1						0	16.86843	10.00509
Kahla								0	37.36172
Onke Hemma	am								0
		Pr	ob>Mahalan	obis di stance	for squared	distance to va	rietv		
Variétés	Assal	Bakor	Beyda	Hamra	Bouafasse	Chetoui	Hafer	Kahla	Onke
			5				Eljemel		Hemmam
Assal	1.000	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Bakor		1.000	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Beyda			1.000	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Hamra				1.000	<.0001	<.0001	<.0001	<.0001	<.0001
Bouafasse					1.000	<.0001	<.0001	<.0001	<.0001
Chetoui						1.000	<.0001	<.0001	<.0001
Hafer Eljeme	:1						1.000	<.0001	<.0001
Kahla								1.000	<.0001
Onke Hemma	am								1.000

Table 5: Square distances between local varieties, f values and probability values



Figure 3: Projection of the average points of local and imported fig varieties on the first factor of a main component analysis. (Light *pink circle: imported 02 BS; dark pink circle: imported XYSS; Yellow circle: imported FYZ THR; grey circle: imported XXSS; brown circle: imported 06 DJ; purple circle: imported YYSS; dark purple circle: imported 04 DJ*

Factors determining the identification of local varieties.

In order to identify the factors that discriminate each local varieties of fig, we used the STEPDISC procedure in the publisher of SAS version 9. The results obtained show that the factors determining the identity of different local varieties, in descending order, are as follows: the skin color of the fruit, with R 2.00-0.79; followed by the length of the fruit (R^2 -0.56). The third factor is the type of apical connection, with R^2 -0.53. Last, we found the number of sheets per shoot with R^2 -0.50, (**Table 7**).

These results confirmed our remarks in the field, where figs most often used fruit-binding characteristics to distinguish varieties from fig trees, and the density of the tree is also used to identify cultivars; this confirms that these factors have been well selected and can be used officially for varietal identification.

Grouping of homogeneous varieties

The four factors that discriminate different varieties allowed us to group them according to each factor:

Consistent varieties by skin color of fruit

The grouping of homogeneous varieties according to the skin color of the fruit is achieved by the use of a generalized linear model, with the comparison of the two-to-two averages by the use of the DUNCAN WALLER test. The grouping showed that the four local varieties Hamra, Bakor, Bouafasse and Kahla have a similar fruit skin color. The second group is represented by Onk hemam. In the third group, Assal variety. The fourth group includes three varieties, namely Chetoui, Beyda and Hafer ejemal.

Consistent varieties by fruit length

The results of the groupings obtained indicate that local varieties are classified into five distinct groups. This classification is based on the length of the fruit. The first group includes two varieties, Onk hemam and Bakor. The second group is represented by Bouafasse. The third group shows that the three varieties Chetoui, Hafer ejemal and Beyda are similar. The fourth group includes two varieties, Assal and Kahla. Finally, in the fifth group consists of only Hamra variety.

Table 6. Squa	Table 6. Square distances (D ²) between local and imported varieties (two-to-two comparison).															
							Squared Di	istance to v	ariete							
	Bayda espaniol	04DJ	6 DJ	Assal	Bakor	Beyda	Khadra Baraniya	Hamra	IMPXY	XXSS	bouafass e	chetoui	hafer ejemal	kahla	onk hemam	pYYSS
Bay da espaniol	0	47.7572 0	51.5269 2	53.7011 8	67.7148 3	11.7387 9	169.82944	39.27181	47.07840	52.12569	51.17916	41.28021	60.32147	44.22096	55.39040	69.32144
04DJ		0	65.4250 5	58.3739 7	67.9916 0	24.1674 4	205.89897	43.70296	57.77365	53.23485	47.30526	31.73492	42.52723	42.22835	47.26164	106.4649 7
6 DJ			0	21.3520 8	43.0038 6	46.2815 6	136.45796	28.08102	21.23314	27.42534	40.46473	36.28452	77.73807	41.02550	69.28882	17.96246
Assal				0	55.7600 4	42.8985 9	179.03553	31.99217	37.51763	39.85532	52.03862	26.74021	70.65223	40.05450	91.25689	38.29215
Bakor					0	57.6069 5	219.19601	41.22188	46.56953	40.26095	40.13935	58.35744	108.89392	41.86404	73.84198	66.49553
Beyda						0	164.56669	32.20941	38.88606	40.55787	37.96662	25.51231	35.39174	30.13213	37.90503	71.34414
Khadra Baraniya							0	193.8728 1	126.0350 7	128.8945 1	170.3373 4	155.6589 3	148.28373	201.8684 6	171.94632	2133.3204 6
Hamra								0	33.39130	46.71022	31.18172	35.17080	74.00608	7.49003	60.86276	52.14246
IMPXY									0	11.64465	48.62388	26.32073	62.61147	39.85417	63.84082	33.81720
XXSS										0	46.11656	28.55792	55.02333	52.95020	58.18344	35.96988
bouafasse											0	56.31827	61.48752	25.77302	40.84064	56.91889
chetoui												0	39.10740	42.06232	59.77305	51.38427
hafer ejemal													0	68.79790	49.43974	88.44325
kahla														0	60.77901	65.93422
onk hemam															0	92.78973
pYYSS																0

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Character	R partial s quare	Value F	Pr > F	LANBDA DE wILK	Pr < Lanbda	Squared canonical correlation	Pr > ASCC
CLPOFR	0.7990	224.56	<.0001	0.20102773	<.0001	0.09987153	<.0001
LGFR	0.5634	72.75	<.0001	0.08776886	<.0001	0.17028004	<.0001
BRAPPL	0.5316	63.84	<.0001	0.04110916	<.0001	0.23651597	<.0001
NFTRPL	0.5030	56.80	<.0001	0.02043124	<.0001	0.29376730	<.0001
LONGF	0.3650	32.19	<.0001	0.01297326	<.0001	0.32157535	<.0001
HPL	0.2870	22.50	<.0001	0.00924946	<.0001	0.35307361	<.0001
CLOST	0.2433	17.92	<.0001	0.00699918	<.0001	0.37304554	<.0001
PTLF	0.2291	16.53	<.0001	0.00539586	<.0001	0.39667222	<.0001
FACEPFR	0.2197	15.63	<.0001	0.00421025	<.0001	0.41658349	<.0001
FORMF	0.1800	12.15	<.0001	0.00345249	<.0001	0.43063494	<.0001
LNTFR	0.1734	11.59	<.0001	0.00285388	<.0001	0.44716634	<.0001
POIFR	0.1654	10.93	<.0001	0.00238180	<.0001	0.45975362	<.0001
FORMFR	0.1775	11.87	<.0001	0.00195892	<.0001	0.47283543	<.0001
LARGF	0.1369	8.71	<.0001	0.00169068	<.0001	0.47927057	<.0001
PTLF	0.1366	8.66	<.0001	0.00145977	<.0001	0.48853424	<.0001
FORMPL	0.1344	8.48	<.0001	0.00126352	<.0001	0.49804623	<.0001
SURFCHRF	0.1179	7.28	<.0001	0.00111457	<.0001	0.50431469	<.0001
NVRMPL	0.1153	7.09	<.0001	0.00098603	<.0001	0.50939889	<.0001
FBASF	0.1091	6.64	<.0001	0.00087847	<.0001	0.51627023	<.0001
FLOBF	0.0976	5.86	<.0001	0.00079271	<.0001	0.52132520	<.0001
DTLMRGE	0.0922	5.49	<.0001	0.00071959	<.0001	0.52524070	<.0001
NLOBF	0.0868	5.12	<.0001	0.00065717	<.0001	0.52942272	<.0001
CRPOFR	0.845	4.96	<.0001	0.00060163	<.0001	0.53409347	<.0001
CLF	0.766	4.45	<.0001	0.00055556	<.0001	0.53771885	<.0001
VNTF	0.0611	3.48	0.0007	0.00052159	<.0001	0.54126440	<.0001
CLPTLF	0.0490	2.75	0.0058	0.00049606	<.0001	0.54365146	<.0001
SURCVFR	0.0461	2.57	0.0095	0.00047320	<.0001	0.54544684	<.0001
FRMPOFR	0.0427	2.37	0.0168	0.00045301	<.0001	0.54925801	<.0001
SCRFR	0.0371	2.04	0.0402	0.00043619	<.0001	0.55105289	<.0001
CLBRPL	0.0320	1.75	0.0860	0.00042224	<.0001	0.55329294	<.0001

Table 7: Results of the STEPDISC procedure used to identify the determining factors

Homogeneous varieties by apical connections

The results of the grouping obtained indicate that the local varieties are classified into three distinct groups. This classification is based on the apical branches of the tree. The first group includes five varieties, Onk hemam, Kahla, Beyda, Bouafasse, and Hafer ejemal. The second group is represented by Hamra. The last group shows that the three varieties Bakor, Chetoui, and Assal are similar.

Homogeneous varieties by number of leaves per shoot

The results of the grouping obtained indicate that the local varieties are classified into five distinct groups. This classification is based on the number of leaves per shoot. The first group is represented by the Assal variety. The second group contains the Bouafasse variety. The third group brings together the two varieties: Kahla and Hamra. The fourth group brings together the varieties: Bayda, Bakor, Hafer Ejemal, and Onk Hemam. Finally, in the last group, we have the Chetoui variety.

Conclusion

Our study aims to characterize and compare different varieties of fig trees existing in the Tlemcen region (local and imported varieties). We based our morphological description of the tree on the

vegetative and reproductive parts of the fig tree. These morphological parameters that we have used are described in the international descriptor of the IPGRI (International Plant Genetic Resources Institute) and CIHEAM (International Center for Mediterranean Agricultural Studies). The use of the results of statistical analyses of the morphological, qualitative, and quantitative data in this study showed that there are significant phenotypic differences between the varieties studied. The results of the principal component analysis (PCA) separated the populations of fig trees studied into 9 distinct groups for local varieties. This reflects the wide variety that exists for this resource at the prospecting region level. The two-to-two comparison between these local varieties, as well as the estimate of square distances between these varieties, showed that there is a very highly significant difference between all local varieties (P<0.001). The value of the highest D2 distance is noted between the two varieties Bakor and Hafer ejemal, indicating that these two varieties are the two most morphologically distant local varieties (D²-130.30). The lowest value (between Kahla and Hamra) indicates that the two Kahla and Hamra varieties are the two most morphologically identical local varieties (D2-7.11). This remoteness and morphological approximation between the study varieties may also have been a genetic phenomenon. Comparison of local and imported variety populations separated due to populations into 16 distinct groups. The results of the distance allowed us to infer that the imported variety Khadra Baraniya (01 FYZ) does not resemble any population of local varieties. On the other hand, the imported variety Spanish Bayda morphologically resembles the local variety Beyda (D²-11.73). This fact shows that the different imported varieties apart from the Khadra Baraniya variety not due to be introduced because it does not bring a plus to the existing potentials and may be on the contrary the origin of the introduction to the level of our genetic potential of allelic variant sensitive to local agroecological conditions. Factors discriminate local varieties, in descending order, are as follows: The skin color of the fruit, followed by the length of fruit, then apical branching and finally the number of leaves per shoot. The rest of the variables do not differentiate between varieties. This result clearly shows that the identification of cultivars by farmers according to their traditional knowledge is consistent with the results of this study and therefore very effective. As a result, homogeneous varieties were grouped according to each factor. This study has therefore provided an important tool for varietal identification for the scientific community. In this study, the approach used for statistical analysis of morphological, qualitative, and quantitative characterization data facilitated the distinction of nine varieties into well-individualized groups, based on all the most discriminating traits identified on the 33 morphological traits (24 qualitative and 9 quantitative) selected. This morpho-biometric description and identification of existing fig varieties in the Tlemcen region, can be considered as a complementary approach and a starting point for other characterization methods. Nevertheless, molecular characterization is necessary for the identification of fig varieties to be more accurate as well as to demonstrate the genetic richness of fig cultivars in the region. However, during our field survey and exploration we detected several threats of this biodiversity that are mainly sociocommercial; on the one hand we have the problem of homonymy and synonym, the aging of trees and the neglect of orchards. On the other hand, the lack of marketing strategy and the enhancement of varieties in the region which also bring farmers to variety imports that was in most cases not justified according to our study. This conclusion sounds the death knell for important measures to be taken in terms of the management of this resource which must continue more regions in Algeria with more varieties, but above all implement by a molecular study.

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Appendix 1

Table 1: Percentage of qualitative character distribution at the variety studied level.

Variety	Variable	Min	Max	Average	Standard deviation
	Weight of the fruit	42g	82g	60.2g	10.6g
	Fruit length	5.05 cm	7.96 cm	6.6 cm	0.7 cm
	Fruit width	2.84 cm	5.29 cm	4.16 cm	0.56 cm
	Ostiole surface	$0.15 \mathrm{cm}^2$	1.41 cm^2	$0.49 \mathrm{cm}^2$	$0.25 \mathrm{cm}^2$
Bakor	Fruit pulpit surface	5.29 cm^2	26.45 cm^2	14.75 cm^2	5.45 cm^2
	Cavity surface	0 cm^2	2.49 cm^2	$0.68 \mathrm{cm}^2$	$0.6 {\rm cm}^2$
	Leaf length	11.88 cm	23.36 cm	15.87 cm	3.08 cm
	Leaf width	10.27 cm	23.09 cm	15.12 cm	3.28 cm
	Petiole	4.65 cm	13.07 cm	8.03 cm	2.06 cm
	Weight of the fruit	11g	46g	25.47 cm^2	5.27g
	Length	2.79 cm	5.81cm	4.27 cm^2	0.66 cm
	Ernit width	2.77 cm	4.0 cm	3.84 cm^2	0.44 cm
		2.77 CIII	4.9 Cm	5.64 cm	0.44 CIII
Kahla	Ostiole surface	0.1cm^2	1.28cm ²	0.94 cm^2	6.77 cm^2
Kailla	Fruit pulpit surface	2.15 cm^2	19.37 cm ²	9.33 cm ²	3.92 cm^2
	Cavity surface	$0 \mathrm{cm}^2$	1.22 cm^2	0.34 cm^2	0.27 cm^2
	Leaflength	10.11 cm	26.36 cm	16.36 cm	3.15 cm
	Leafwidth	9.39 cm	22.85 cm	14.38 cm	2.74 cm
	Petiole	5.15 cm	12.15 cm	7.46 cm	1.97 cm
	Weight of the fruit	12g	39g	22.13g	5.01g
	Length	2.72cm	5.59cm	3.90 cm	0.49cm
	Fruit width	2.75cm	4.43cm	3.67 cm	0.31cm
	Ostiole surface	0.09 cm^2	$1.90 {\rm cm}^2$	$0.46 {\rm cm}^2$	$0.38 \mathrm{cm}^2$
Hamra	Fruit pulpit surface	4.86 cm ²	20.36 cm ²	10.63 cm ²	4.13 cm^2
	Cavity surface	0 cm^2	$2.80 \mathrm{cm}^2$	0.41 cm^2	0.4 cm^2
	Leaf length	11.18 cm	29.09 cm	16.84 cm	4.15 cm
	Leaf width	9.39 cm	25.35 cm	13.10 cm	3.74 cm
	Petiole	3.35 cm	11.39 cm	7.76 cm	2.38 cm
	Weight of the fruit	10g	74g	32.71g	10.78g
	Length	2.55 c	8.16 cm	50.3 cm	0.86 cm
	Fruit width	2.36 cm	5.85 cm	4.25 cm	0.62 cm
	Ostiole surface	0.03 cm^2	2.84	$0.42 \mathrm{cm}^2$	$0.33 \mathrm{cm}^2$
Beyda	Fruit pulpit surface	3.39 cm^2	19.35 cm^2	$9.10 \mathrm{cm}^2$	3.44 cm^2
	Cavity surface	$0 \mathrm{cm}^2$	$0.99 \mathrm{cm}^2$	0.21 cm^2	$0.23 \mathrm{cm}^2$
	Leaf length	12.36 cm	28.29 cm	17.59 cm	3.55 cm
	Leaf width	6.97 cm	22.95 cm	15.10 cm	3.37 cm
	Petiole	1.00 cm	22.27 cm	2.21 cm	2.54 cm
	Weight of the fruit	15g	77g	36.50g	13.11g
	Length	3.19cm	7.52 cm	5.30 cm	0.98cm
	Fruit width	3.17cm	6.45cm	4.59 cm	0.69cm
	Ostiole surface	0.07 cm^2	4.44 cm^2	$0.68 {\rm cm}^2$	$0.56 \mathrm{cm}^2$
Charles	Fruit pulpit surface	0.42 cm^2	30.38 cm^2	11.92 cm^2	7.15 cm^2
	Cavity surface	$0 \mathrm{cm}^2$	2.07 cm^2	$0.8 {\rm cm}^2$	$0.39 \mathrm{cm}^2$
	Leaf length	10.60 cm	20.31 cm	14.52 cm	2.02 cm
	Leaf width	9.45 cm	19.38 cm	12.69 cm	2.44 cm
	Petiole	4.19 cm	9.66 cm	6.55 cm	1.37 cm
	Weight of the fruit	14g	42g	25.42g	6.17g
	Length	3.22cm	5.67 cm	4.41 cm	0.49 cm
	Fruit width	2.86 cm	5.24 cm	3.85 cm	0.42 cm
	Ostiole surface	$0.11 \mathrm{cm}^2$	1.12 cm^2	$0.43 {\rm cm}^2$	$0.17 \mathrm{cm}^2$
Assal	Fruit pulpit surface	$4.37 \mathrm{cm}^2$	$14.56 \mathrm{cm}^2$	7.91 cm^2	$1.77 \mathrm{cm}^2$
	Cavity surface	0 cm^2	$0.97 {\rm cm}^2$	$0.31 \mathrm{cm}^2$	$0.21 \mathrm{cm}^2$
	Leaf length	10.93 cm	17.92 cm	14.13 cm	1.70 cm
	Leaf width	9.28 cm	16.21 cm	12.57 cm	2.08 cm
	Petiole	4.02 cm	8.37 cm	5.86 cm	1.16 cm
I	Weight of the fruit	20g	88g	46.09g	15.70g
	Length	4.06 cm	7.06 cm	5.76 cm	0.91 cm
	Fruit width	3.11 cm	7.03 cm	4.77 cm	0.77 cm
	Ostiole surface	0.04 cm^2	1.41 cm^2	$0.35 \mathrm{cm}^2$	$0.30 \mathrm{cm}^2$
Bouafasse	Fruit pulpit surface	$2.99 \mathrm{cm}^2$	25.13 cm^2	13.61 cm^2	5.84 cm^2
	Cavity surface	0 cm^2	1.54 cm^2	0.37 cm^2	$0.40 \mathrm{cm}^2$
	Leaf length	15.39 cm	28.17 cm	21.67 cm	2.53 cm
	Leaf width	14.12 cm	26.41 cm	20.98 cm	2.11 cm
	Petiole	4.41 cm	10.51 cm	7.97 cm	1.12 cm

	Weight of the fruit	21g	74g	42.57g	13.14g
	Length	4 07 cm	8 87 cm	6.32 cm	0.95 cm
	Emit width	2 25 cm	6.39 cm	4.75 cm	0.67 cm
		5.55 cm^2	0.38 cm	4.75 cm	0.07 cm
0.1.1	Ostiole surface	0.13 cm	1.10 cm	0.46 cm	0.20 cm
Onk hemam	Fruit pulpit surface	3.23 cm ²	12.88cm ²	3.38 cm ²	2.28 cm ²
	Cavity surface	0 cm^2	0.41cm^2	0.03cm^2	0.08 cm^2
	Leaf length	17.13 cm	36.81 cm	23.80 cm	4.19 cm
	Leaf width	13.12 cm	25.53 cm	19.06 cm	2.69 cm
	Petiole	7.18 cm	13.32 cm	10.84 cm	1.59 cm
	Weight of the fruit	350	63¢	53 12σ	9 090
	Longth	2 72 cm	6 21 om	5 20 cm	0.87 cm
	Ecligin Emit midth	5.75Cm	6.82	5.01 am	0.67 cm
	Fruit width	4.75 cm	0.82 cm	5.91 cm	0.68 cm
	Ostiole surface	0.35 cm ⁻	0.79 cm ⁻	0.53 cm ⁻	$0.1 / \text{cm}^2$
Hafer Ejemal	Fruit pulpit surface	9.61 cm ²	17.85cm ²	13.44 cm^2	2.94cm ²
	Cavity surface	$0.12 \mathrm{cm}^2$	1.09 cm^2	0.54 cm^2	$0.29 \mathrm{cm}^2$
	Leaf length	20.08 cm	26.03 cm	22.28 cm	1.89 cm
	Leaf width	17.98 cm	22.80 cm	19.8 cm	1.70 cm
	Petiole	5.99 cm	10.55 cm	8.62 cm	1.56 cm
	Weight of the fruit	30g	50g	46 66g	7.84g
	Weight of the fluit	7.01 am	0.97 mm	40.00g	1.04g
	Length	7.01 cm	9.87 cm	8.79 cm	1.18 cm
	Fruit width	4.7 cm	8.96 cm	7.22 cm	1.56 cm
Imported 01	Ostiole surface	1.08 cm ²	2.56 cm ²	1.47 cm^2	$0.55 \mathrm{cm}^2$
(Khadra	Fruit pulpit surface	16.17 cm^2	36.65 cm^2	$26 \mathrm{cm}^2$	8.27 cm^2
baraniya)	Cavity surface	$0.89 {\rm cm}^2$	1.43 cm^2	$0.93 \mathrm{cm}^2$	$0.36 \mathrm{cm}^2$
•	leaf length	24.43 cm	30.38 cm	26.27 cm	1.29 cm
	leaf width	7.34 cm	34.65 cm	27.7 cm	6.46 cm
	Petiole	13.6 cm	23 79 cm	15.57 cm	2.02 cm
	Weight of the fruit	10.0 cm	<u> </u>	41.20~	11.0%
	weight of the fluit	19g	02g	41.29g	11.08g
	Length	3.8/cm	6.1 cm	5.16 cm	0.53 cm
	Fruit width	3.2 cm	5.78 cm	4.54 cm	0.62 cm
Imported 02	Ostiole surface	0.28 cm^2	0.94 cm^2	0.62cm^2	0.19 cm^2
(bayda	Fruit pulpit surface	8.32cm^2	24.45 cm^2	$15.68 \mathrm{cm}^2$	$3.67 \mathrm{cm}^2$
espangiol)	Cavity surface	0 cm^2	3.07 cm^2	$0.49 \mathrm{cm}^2$	$0.73 \mathrm{cm}^2$
1 0 /	Leaf length	17.18 cm	19.98 cm	18.25 cm	0.91 cm
	Leafwidth	11.81 cm	17.41 cm	14.14 cm	1.63 cm
	Petiole	7.06 cm	12.24 cm	9.84 cm	1.30 cm
	Weight of the fruit	22 a	60g	40.32 g	0.68a
	weight of the fluit	23g	09g	40.32g	9.08g
	Length	3.95 cm	6.69 cm	5.35 cm	0./3 cm
Imported 03	Fruit width	3.85 cm	5.91 cm	4.87 cm	0.4 / cm
(chetoui	Ostiole surface	0.27 cm ²	$1.56 \mathrm{cm}^2$	$0.61 \mathrm{cm}^2$	0.27 cm^2
eneroul	Fruit pulpit surface	7.95 cm ²	20.35 cm^2	13.83 cm ²	2.88 cm^2
espanioi homentes)	Cavity surface	$0 \mathrm{cm}^2$	$1.81 \mathrm{cm}^2$	$0.46 \mathrm{cm}^2$	$0.42 \mathrm{cm}^2$
brunette)	Leaf length	15.16 cm	7.32 cm	16.52 cm	1.23 cm
	leaf width	14.32 cm	19.02 cm	16.36 cm	1.59 cm
	Petiole	5.92 cm	9.03 cm	6.95 cm	0.99 cm
	Weight of the fruit	25g	97g	39.11g	11.87g
	L an ath	2.5 g	6 08 am	5 21 am	0.59
	Length	4.19 cm	6.08 cm	5.21 cm	0.58 cm
T 104	Fruit width	3./5 cm	5.99 cm	4.79 cm	0.53 cm
Imported 04	Ostiole surface	0.27cm^2	0.85 cm ²	$0.55 \mathrm{cm^2}$	$0.15 {\rm cm}^2$
(chetoui	Fruit pulpit surface	$7.46 \mathrm{cm}^2$	18.52cm ²	12.21 cm^2	$2.86 \mathrm{cm}^2$
espaniol)	Cavity surface	$0 \mathrm{cm}^2$	$0.77 \mathrm{cm}^2$	$cm^{2}0.23$	$0.21 \mathrm{cm}^2$
-	Leaf length	15.1 cm	20.39 cm	17.35 cm	1.38 cm
	leaf width	15.21 cm	20.90 cm	17.77 cm	1.48 cm
	Petiole	7.02 cm	12.38 cm	9.45 cm	2.08 cm
	Weight of the fruit	180	5/2	27.67 a	7 88~
		10g	54g	21.0/g	1.00g
	Length	4.52 cm	0.02 cm	5.15 cm	0.55 cm
	Fruit width	3.2 cm	4.98 cm	3.88 cm	0.44 cm
Imported 05	Ostiole surface	$0.16 \mathrm{cm}^2$	0.83 cm^2	$0.33 \mathrm{cm}^2$	0.14 cm^2
(Zamilei)	Fruit pulpit surface	6.32 cm^2	$14.79 \mathrm{cm}^2$	$8.53 \mathrm{cm}^2$	1.94 cm^2
(Zeriki)	Cavity surface	0 cm^2	2.43 cm^2	$0.31 \mathrm{cm}^2$	0.43 cm^2
	leaflength	16.52 cm	19.89 cm	17.98 cm	0.86 cm
	leaf width	15.36 cm	7.27 cm	17.28 cm	0.95 cm
	Detiole	7.96 cm	13.68 cm	9.71 cm	1.95 cm
	1 01010	7.70 Cm	15.00 011	J. / I UIII	1.75 CIII

Appendix 2

Table 2: Percentage of qualitative character distribution at the variety studied

1	- and	See.	Con Con	
9			-)	
	-		1	
57				•
	E			

Variety Bakor



1		2	
	Character	Variable	%
		Erect	50
	Shape of the Tree	Semi-erect	34
	<u>I</u>	Open	18
		Intermediate	80
	Tree Vigour	High	20
		Absent	80
	Apicale Branch	Present	20
		Saparata	80
	Ramification Level	Intermediate	20
		Drawn	20
	Color of Branches	Brown	80
		Black Brown	20
	Number of Leaves pershoot	4-8	100
		Black	94
	Skin Color	Black Spotted Brown	4
		Black Spotted In Green	2
	Shape of the fruit	Bell	88
	Bildpe of the fruit	Oval	12
		Pink	46
		Yellow	26
	Ostiole Color	Red	10
		Transparent	8
		Rose White	8
		Differently Expanded (A-E)	50
	Shape of Peduncle	Long And Thin	28
		Short And Thick	22
		Hard	38
	Easy peeling	Medium	38
1	Easy peening	Easy	24
		Abcont	24
	Fruit Skin Cracks	Ausein	94
		Rafe Cracks	0
		Sweet	45
	Firmness of the Fruit Skin	Medium Firmness	30
		Farm	18
		Rubber	8
		Many	62
	Lenticel	Medium	34
		Rare	4
	Color Lanticels	Pink	62
	Color Lentreels	White	38
		Aromatic	60
		Little	30
	Fruit Flavour	Strong	6
		Neutral	4
		В	35
		Has	33
	T CO	С	8
	Leaf Shape	D	8
		 F	8
		<u>F</u>	8
		5 Lobes	60
	Number of Lobes	3 Lobes	40
		Snatulated	78
		Lanceolate	10
	Shape of Lobe	Lincor	0
	-	Linear	0
		Lyre	<u> </u>
	a	Auriculated	88
	Shape of Leaf base	Corded	8
		Haste	5
	Dentition of the edges of the	Crenellated	68
	Leaf	Absent	25
		Toothed	8

		Effective	55
	Leaf Nervation	Inapparente	35
		Slightly Apparent	10
		Dark Croop	70
	Leaves Color —	Dark Green	70
		Green	30
		Green	68
	Patiala Calor	Brown	17
		Pink	10
	_	Yellowish Green	5
Kahla		Open	18
Kama	Shana of the True	Sami Sanaada	50
	shape of the Tiee	Senn-spreads	30
		Spread	34
	Tree Vigour	Intermediate	60
		Raise	40
	Apicale Branch	This	100
	*	Intermediate	80
Contraction of the local division of the loc	Ramification Level —	Dense	20
		Creat	20
Constant of the second	<u> </u>	Grey	80
	Color of Branches	Grey Black	20
A DECEMBER OF THE OWNER OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OWNER OWNER OF THE OWNER OWNE OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNER OWNE OWNER OWNE OWNER OW		Brown-Black	20
	Nomber of Lease Deach ant	9-12	60
A CONTRACTOR OF THE OWNER OF THE	Number of Leaves Pershoot —	4-8	40
State of the second second second second		Black	84
ALLER STREET OF CONTRACT STREET	—	Durple	
		T uple	4
	Skin Color	Green	3
	_	Mauve, Green Spots	3
		Brown and Red	6
		Rounded	65
	Shape of the Fruit	Oval	22
		Bell	13
A CONTRACT OF A		Ped	33
1 distant and	—	Dinla	
		Pink	32
at a grant hand	Ostioles Color —	Black	20
A CONTRACTOR OF A CONTRACTOR O		Black, Red	9
at the second		Transparent	3
		Red Rose	3
· · · · · · · · · · · · · · · · · · ·		Differently Expanded	56
· · · · · · · · · · · · · · · · · · ·	Shape of Peduncule	Short and Thick	30
		Langard Thin	55
		Long and Thin	
the second s		Hard	39
		Hasy	
	Easy of Peeling	Lusy	33
	Easy of Peeling	Medium	26
	Easy of Peeling	Medium Cracks Minutes	26 62
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks	26 62 31
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent	26 62 31 7
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness	26 62 31 7 43
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Bubber	26 62 31 7 43 24
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber	33 26 62 31 7 43 24
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm	33 26 62 31 7 43 24 19 11
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet	33 26 62 31 7 43 24 19 14
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many	33 26 62 31 7 43 24 19 14 67
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ \end{array} $
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \end{array} $
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ \end{array} $
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ 28 \\ \end{array} $
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ 28 \\ 55 \\ 55 \\ 55 \\ 55 \\ 55 \\ 55 \\ 55 \\ 5$
	Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic	$ \begin{array}{r} 33\\ 26\\ 62\\ 31\\ 7\\ 43\\ 24\\ 19\\ 14\\ 67\\ 30\\ 4\\ 72\\ 28\\ 55\\ 22\\ 8\\ 55\\ 22\\ 28\\ 28\\ 55\\ 22\\ 28\\ 55\\ 22\\ 28\\ 28\\ 28\\ 28\\ 28\\ 28\\ 28\\ 28\\ 28$
	Fruit Skin cracks	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little	$ \begin{array}{r} 33\\ 26\\ 62\\ 31\\ 7\\ 43\\ 24\\ 19\\ 14\\ 67\\ 30\\ 4\\ 72\\ 28\\ 55\\ 33\\ 5\\ 33\\ 7 $
	Easy of Peeiing Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong	$ \begin{array}{r} 33\\ 26\\ 62\\ 31\\ 7\\ 43\\ 24\\ 19\\ 14\\ 67\\ 30\\ 4\\ 72\\ 28\\ 55\\ 33\\ 7\\ \end{array} $
	Easy of Peeiing Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ 28 \\ 55 \\ 33 \\ 7 \\ 5 \end{array} $
	Easy of Peeing Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ 28 \\ 55 \\ 33 \\ 7 \\ 5 \\ 27 \\ \end{array} $
	Easy of Peeing Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B C	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ 28 \\ 55 \\ 33 \\ 7 \\ 5 \\ 27 \\ 13 \\ \end{array} $
	Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor Leaf Shape	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B C D	$ \begin{array}{r} 33\\ 26\\ 62\\ 31\\ 7\\ 43\\ 24\\ 19\\ 14\\ 67\\ 30\\ 4\\ 72\\ 28\\ 55\\ 33\\ 7\\ 5\\ 27\\ 13\\ 32\\ \end{array} $
	Easy of Peeing Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor Leaf Shape	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B C D	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ 28 \\ 55 \\ 33 \\ 7 \\ 5 \\ 27 \\ 13 \\ 32 \\ 21 \\ \end{array} $
	Easy of Peeing	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B C D E	$ \begin{array}{r} 33\\ 26\\ 62\\ 31\\ 7\\ 43\\ 24\\ 19\\ 14\\ 67\\ 30\\ 4\\ 72\\ 28\\ 55\\ 33\\ 7\\ 5\\ 27\\ 13\\ 32\\ 21\\ 2 \end{array} $
	Easy of Peeing	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B C D E F	$ \begin{array}{r} 33\\ 26\\ 62\\ 31\\ 7\\ 43\\ 24\\ 19\\ 14\\ 67\\ 30\\ 4\\ 72\\ 28\\ 55\\ 33\\ 7\\ 5\\ 27\\ 13\\ 32\\ 21\\ 3\\ \end{array} $
	Easy of Peeing Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor Leaf Shape	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B C D E F 5 Lobes	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ 28 \\ 55 \\ 33 \\ 7 \\ 5 \\ 27 \\ 13 \\ 32 \\ 21 \\ 3 \\ 49 \\ \end{array} $
	Easy of Peeing Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor Leaf Shape Number of Lobes	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B C C D E F F 5 Lobes 3 Lobes	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ 28 \\ 55 \\ 33 \\ 7 \\ 5 \\ 27 \\ 13 \\ 32 \\ 21 \\ 3 \\ 49 \\ 44 \\ \end{array} $
	Easy of Peeing Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor Leaf Shape Number of Lobes	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B C D E F F 5 Lobes 3 Lobes 4 Lobes	$ \begin{array}{r} 33 \\ 26 \\ 62 \\ 31 \\ 7 \\ 43 \\ 24 \\ 19 \\ 14 \\ 67 \\ 30 \\ 4 \\ 72 \\ 28 \\ 55 \\ 33 \\ 7 \\ 5 \\ 27 \\ 13 \\ 32 \\ 21 \\ 3 \\ 49 \\ 44 \\ 7 \end{array} $
	Easy of Peeing Fruit Skin cracks Firmness of the fruit skin Number of Lenticel Color of Lenticel Fruit Flavor Leaf Shape Number of Lobes	Medium Cracks Minutes Rare Cracks Absent Medium Firmness Rubber Farm Sweet Many Medium Rare Pink White Aromatic Little Strong Neutral B C D E F 5 Lobes 3 Lobes 4 Lobes Snatulated	$ \begin{array}{r} 33\\ 26\\ 62\\ 31\\ 7\\ 43\\ 24\\ 19\\ 14\\ 67\\ 30\\ 4\\ 72\\ 28\\ 55\\ 33\\ 7\\ 5\\ 27\\ 13\\ 32\\ 21\\ 3\\ 49\\ 44\\ 7\\ 56\\ \end{array} $

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	Lanceolate	16
	Lyré	6
_	Corded	40
Shape of Leaf Base –	Auriculated	39
-	I runcated	19
	Finely Crenellated	47
Dentition of the edges of the -	Toothed	30
Leaf –	Absent	24
	Slightly Apparent	65
Leaf nervation	Inapparente	24
	Effective	11
	Dark Green	51
Color Leaf	Green	40
	Brown	30
-	Yellowish Green	2.9
Petiole Color –	Green	22
-	Pink	11
Shape of the Tree	Spread	60
Shape of the Tiee	Open	40
Tree Vigour	Intermediate	60
	Raise	40
Apicale Branch	I his	100
Rainincation Level	Grev	80
Color of Branches –	Grev Black	20
	4-8	60
Number of Leaves Pershoot –	9-12	40
	Brown	56
Skin Color	Purple	28
	Green or Mauve	16
Shana of the fruit	Rounded	73
Snape of the fruit	Oval	24
	Pink	51
	T IIII	
	Transparent	32
Ostioles Color	Red	<u> </u>
Ostioles Color	Red Yellow	<u> </u>
Ostioles Color	I ransparent Red Yellow YellowRose	32 7 6 4
Ostioles Color	Red Yellow YellowRose Short and Thick	32 7 6 4 55
Ostioles Color Shape of Peduncule	I ransparent Red Yellow Yellow Rose Short and Thick Differently Expanded Longond Thin	
Ostioles Color Shape of Peduncule	I ransparent Red Yellow Short and Thick Differently Expanded Long and Thin Hard	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 50 \\ \hline $
Ostioles Color Shape of Peduncule	I ransparent Red Yellow Short and Thick Differently Expanded Long and Thin Hard Medium	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling	I ransparent Red Yellow Short and Thick Differently Expanded Long and Thin Hard Medium Easy	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling	I ransparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks	I ransparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks	I ransparent Red Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 12 \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks	I ransparent Red Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 20 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color	Transparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color	I ransparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 11 $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color	I ransparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel	I ransparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel	Transparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Rare	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel	Transparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Rare Medium	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ - - - - - $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel	Transparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Many Rare Pink White	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 21 \\ 10 \\ 79 \\ 21 \\ 10 \\ 70 \\ 70 \\ 21 \\ 70 \\ $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel	Transparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Many Rare Pink White Aromatic	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 10 \\ 79 \\ 21 \\ 48 \\ 42 \\ 30 \\ 30 \\ 10 \\ 70 \\ 70 \\ 21 \\ 48 \\ 42 \\ 30 \\ 10 \\ 70 \\ 70 \\ 70 \\ 70 \\ 70 \\ 21 \\ 30 \\ 30 \\ 10 \\ 70 \\ $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel Fruit Flavor	Transparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Many Rare Pink White Aromatic Little	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 70 \\ 21 \\ 48 \\ 43 \\ 10 \\ 70 \\ 21 \\ 48 \\ 43 \\ 10 \\ 70 \\ 21 \\ 48 \\ 43 \\ 10 \\ 70 \\ 21 \\ 48 \\ 43 \\ 10 \\ 70 \\ 70 \\ 21 \\ 48 \\ 43 \\ 10 \\ 70 \\ 70 \\ 21 \\ 48 \\ 43 \\ 10 \\ 70 \\ 70 \\ 21 \\ 70 \\ $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel Fruit Flavor	Transparent Red Yellow Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Many Rare Pink White Aromatic Little Neutral	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 8 \\ 8 \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel Fruit Flavor	Transparent Red Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Many Rare Pink White Aromatic Little Neutral B C	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 8 \\ 4 \\ 4 4 10 \\ 8 \\ 4 4 4 10 \\ 8 \\ 4 4 4 10 \\ 8 \\ 4 4 4 10 \\ 8 \\ 4 4 4 3 3 3 3 3 $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel Fruit Flavor	Transparent Red Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Many Rare Pink White Aromatic Little Neutral B C D	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 8 \\ 44 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel Fruit Flavor Leaf Shape	Transparent Red Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Many Rare Pink White Aromatic Little Neutral B C D E	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 8 \\ 4 \\ 6 \\ 64 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel Fruit Flavor Leaf Shape	Transparent Red Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Many Rare Pink White Aromatic Little Neutral B C D E F	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 8 \\ 4 \\ 6 \\ 64 \\ 11 \\ \end{array} $
Ostioles Color Shape of Peduncule Easy of Peeling Fruit Skin cracks Skin color Number of Lenticel Color of Lenticel Fruit Flavor Leaf Shape	Transparent Red Yellow Rose Short and Thick Differently Expanded Long and Thin Hard Medium Easy Cracks Minutes Absent Rare Medium Firmness Rubber Sweet Farm Medium Many Rare Pink White Aromatic Little Neutral B C D E F G	$ \begin{array}{r} 32 \\ 7 \\ 6 \\ 4 \\ 55 \\ 32 \\ 13 \\ 50 \\ 34 \\ 16 \\ 48 \\ 27 \\ 26 \\ 42 \\ 30 \\ 17 \\ 26 \\ 42 \\ 30 \\ 17 \\ 11 \\ 46 \\ 44 \\ 10 \\ 79 \\ 21 \\ 48 \\ 43 \\ 10 \\ 8 \\ 44 \\ 6 \\ 64 \\ 11 \\ 8 \\ 5 \\ 5 \\ 32 \\ 32 \\ 32 \\ 32 \\ 32 \\ 33 \\ 10 \\ 8 \\ 44 \\ 6 \\ 64 \\ 11 \\ 8 \\ 5 \\ 5 \\ 32 \\ 32 \\ 32 \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\ 33 \\ 34 \\ 33 \\ 33 \\ 35 \\ 34 \\ 35 \\ 35 \\ 36 \\ $

		4 Lobes	13
	-	5 Lobes	13
61	shape of Lobe	Spatulated	47
	-	Lanceolate	28
	-	Linear	25
		Truncated	55
	Share of Loof Page	Corded	19
	Shape of Leaf Base –	Auriculated	17
	=	Stalled	9
		Absent	51
	Dentition of the edges of the –	Toothed	34
	Leaf –	Finely Crenellated	15
		Effective	70
	Leaf nervation –	Slightly Apparent	21
	-	Inapparente	10
		Green	57
	Leaf Color –	Dark Green	43
		Yellowish Green	30
	-	Green	24
		Brown	22
	Petiole color –	Green-Marron	13
	-	Pink	7
	-	Rose-Marron	4
Beyda		Semi-Spreads	80
Doyuk	Shape of the Tree –	Open	20
		Intermediate	60
	Tree vigour –	Lows	40
	Apicale Branch	This	100
	Damification Land	Dense	60
	Ramification Level –	Intermediate	40
	Calar of Brenches	Grey	80
	Color of Branches –	Grey-Black	20
	Number of Leaves Pershoot	4-8	100
		Greenish Clear	73
	Skin Color	Green	25
		Mauve Or Brown	1
		Rounded	46
	Shape of the fruit	Bell	45
		Oval	9
	_	Pink	40
	Ostioles Color -	Tennor	31
	-	I ransparent Ploats	24
		Enlarged	50
	Shapa of padupala	Short And Thick	38
		Long And Thin	10
		Facy	46
	Easy of Peeling	Medium	42
		Hard	12
		Absent	75
	Fruit skin Cracks	CracksMinutes	18
	-	Rare	7
		Medium	41
		Farm	10
	Firmness of the fruit Skin –	Sweet	17
		Rubber	2
		Many	73
	Number of Lenticel	Medium	24
		Rare	3
	Color of Lenticel -	Pink	90
		White	10
	_	Aromatic	48
	Fruit Flavor	Little	35
	_	Strong	
		Neutral	<u> </u>
	Loof Chan-	<u> </u>	<u> </u>
	Lear Snape	n	21
		ν	<i>∠</i> 1



	E	28
-	E C	14
	G	14
<u> </u>	3 Lobes	56
Number of Lobes	5 Lobes	42
-	1 Lobe	3
	Spatulated	64
Shapa of Loba	Lincor	10
Shape of Lobe	Lilleal	19
	Lanceolate	16
	Truncated	49
	Corded	32
Shape of leaf Base	Auriculated	17
-	Stalled	3
	Teethed	72
Dentition of the edges of the -	1 oothed	/3
Leaf	Finely Crenellated	22
Dom	Absent	5
	Effective	71
Leafnervation	Slightly Apparent	6
	Inapparente	12
	Crean	52
		52
Color Leaf	Dark Greens	44
	Light Green	4
	Green	48
	Yellowish Green	32
Petiole color	Brown	12
-	Green_Marron	8
		6
а (т	Erect	60
Shape of I ree	Open	20
	Semi-Spreads	20
T	Raise	80
I ree vigour	Intermediate	20
	Absent	80
Apicale Branch	This	20
	1 mis	20
	Separate	40
Ramification Level	Intermediate	40
	Dense	20
Color of Branches	Grey	100
Number of Leaves Dershoot	4-8	60
Number of Leaves Pershoot	4	40
	Green	98
Skin Color	Brown Green	2
	Bell	58
Shana of the fruit	Poundad	27
Shape of the fluit	Oral	27
	Oval	14
<u> </u>	Pink	61
Ostioles Color	Transparent	20
03110103 00101	Yellow	16
-	Pink	2
	Differently Expanded	58
Shape of pedencule	Short and Thick	38
Shape of pedenetic	LongondThin	
		4
	Easy	01
Easy Peeling	Medium	32
	Hard	7
	Absent	50
	Little	38
Fruit skin cracks	Rare	10
-	Cracks Minutes	2
	Earm	15
Einnen and af the fimit flain	Madium	45
Firmness of the fruit Skin	weatum	43
	Sweet	11
-	Many	81
Number of Lenticel	Medium	17
-	Rare	2
	Pink	82
Color Lenticel	White	18
Fruit Flavor	Aromatic	70
	Little	17
-	Little	1/
	Strong	13







	В	18
-	C	18
Leaf Shape	D	1
-	E	25
	G	38
Number of lobes	<u>3 Lobes</u>	/1
Number of lobes	4 Lobes	<u>_</u>
	Spatulated	68
Shape of Lobe	Lanceolate	18
· _	Linear	14
	Truncated	66
Shape of Leaf Base	Rounded	21
	Corded	8
	Stalled	5
Dentition of the edges of the -	Einely Crenellated	<u> </u>
Leaf –	Toothed	18
	Effective	51
Leaf Nervation –	Slightly Apparent	44
	Inapparente	5
Color Leaf	Dark Green	57
	Green	42
	Light Green	1
_	Yellowish Green	36
Petiole Color –	Brown	34
-	Pink	10
	Open	60
Shap of Tree	Semi-De erect	20
<u> </u>	Semi-Spreads	20
TreeVigour	Intermediate	80
	Raise	20
Apicale Branch –	Absent	80
1	This	20
Ramification Level –	Intermediate	60
	Grev	80
Color of Branches –	Black Grev	20
Number of Louise Dough out	9-12	60
Number of Leaves Pershoot –	12	40
	Green	43
Skin Color –	Green Spotted Mauve	29
_	Green Spotted Brown	21
	Poll	1
Shape of the Fruit	Rounded	44
	Oval	16
	Pink	49
Color Ostioles	Transparent	25
	Yellow	17
	Enlarged	61
Shape of Pedencule	Short and Thick	32
	LongandThin	7
East of Dealing	Easy	46
Easy of Peening	Hard	29
	Absent	43
	Crack	29
Fruit Skin Craks –	Cracks Minutes	20
-	Rare	9
	Medium	38
Firmness of the Fruit Skin	Farm	33
	Sweet	28
Number of Lenticel	Many	75
	Medium Dint	25
Color Lenticel –	YIIIK White	/4
	** 1110	20

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	Aromatic	60
Fruit Flavor	Little	29
	Strong	10
—	B	9
_	C	24
Leaf Shape —	Ē	30
	F	7
	Α	28
Number of Labor	3 Lobes	65
Number of Lobes	3 Lobes	<u> </u>
	Launched	59
Shape of Leaf	Spatulated	24
·	Linear	17
	Truncated	57
Shape of Leaf Base —	Corded	26
	Auriculated	11
	Absent	63
Dentition of the edges of the —	Toothed	2.4
Leaf —	Finely Crenellated	13
	Inapparente	66
Nervation	Slightly Apparent	25
	Effective	8
Leaf Color —	Dark Green	89
	Vellowish Green	63
<u> </u>	Brown	17
Petiole Color	Green	9
—	Green-Marron	7
—	Pink	4
	Open	80
Shap of Tree	Semi-De erect	10
	Semi-Spreads	10
Tree Vigour —	Intermediate	20
Apicale Branch	Present	100
Pomification Level	Dense	60
Kalification Level —	Intermediate	40
	Grey	60
Color of Branches	Grey brown	20
	4-8	<u> </u>
Number of Leaves Pershoot	9-12	20
	>12	20
Skin Color	Black	100
Shape of the Fruit	Bell	91
Shape of the fruit	Oval	9
_	Red	46
Color Ostioles	Black Transparent	<u>32</u> 8
	Pink	<u> </u>
_	Yellow	5
Chang of D-d 1	Enlarged	74
Snape of Pedencule —	Short and Thick	26
	Medium	45
Easy of Peeling	Easy	29
	Hard	26
Fruit Skin Crake	Absent Cracks Minutes	<u>65</u> 10
	Rare	19
	Medium	52
Firmness of the Fruit Skin	Sweet	39
	Farm	10
Number of Lenticel	Many	87
	Medium	13
Color Lenticel	Pink	81

Bouafasse

		XX 71 .	10
		White	19
		Aromatic	68
	Fruit Flavor	Little	19
		Strong	13
		Н	16
	_	D	15
	Leaf Shape —	F	47
	<u> </u>	<u> </u>	22
		21.1	23
		3 Lobes	82
	Number of Lobes	1 Lobes	15
		5 Lobes	2
	Shana of Loof	Launched	79
	Shape of Lean —	Spatulated	21
	· · · · · · · · · · · · · · · · · · ·	Auriculated	52
		Truncated	31
	Shape of Leaf Base	Corded	13
	Shape of Leaf Base	Colded	13
		Hasty	5
	Dentition of the edges of the —	Finely crenellated	47
	Leaf	Toothed	44
	Dear	Absent	13
		Apparent	50
	Nervation	Slightly Apparent	47
		Inapparente	3
		Dark Green	52
	Leaf Color —	Crean	19
		Green	48
	_	Yellowish Green	58
	Petiole Color —	Brown	39
		Green	2
		Green-Marron	2
Onk Hemam	Shap of Tree	Semi-De erect	100
	_	High	80
	Tree Vigour —	Intermediate	20
	Anicale Branch	Present	100
	Apicale Branen	Danaa	60
· · · · · · · · · · · · · · · · · · ·	Ramification Level -	Laterme diete	40
		Intermediate	40
	Color of Branches	Grey	100
	Number of Leaves Pershoot	4-8	100
		Brown mauve	52
The second second second second		mauve, green	18
	a: c i	Mauve	14
	Skin Color –	Brown, green	6
	—	mauveblack	4
		Black-green- manye	6
		Flongate	67
	Shana of the Emit	Pall	29
	shape of the Fluit		<u> </u>
		rounded	5
AND THE REAL PROPERTY OF THE PARTY OF THE PA	_	White	36
	Color Ostioles —	Transparent	36
		Pink	22
		Yellow	7
		Thick	74
	Shape of Pedencule	Enlarged	15
	· _	Thin	11
		Easy	41
	Easy of Peeling	Medium	34
	Lasy of Feeling	Hard	25
		Abcont	23
		Absent	62
	Fruit Skin Craks	Cracks Minutes	33
		Longitudinales Rare	5
		Medium	36
	Firmness of the Fruit Skin	Farm	33
	—	Sweet	31
		Rare	49
	Number of Lenticel	Medium	50
		Mony	2
		Dipl-	5
	Color Lenticel —		00
		white	34
	Fruit Flavor	Aromatic	57

		Little	38
	—	neutral	3
	—	Strong	2
		Strong	11
	T	<u> </u>	20
	Leaf Snape	E	39
		G	50
		3 Lobes	78
	Number of Lobes	1 Lobes	9
	Number of Lobes —	7 Lobes	9
	—	2 lobes	3
		Linear	69
	Shape of Leaf	Launched	22
		Spatulated	9
		Transacted	<i>y</i>
		Truncated	09
	Shape of Leaf Base	Corded	22
		Rounded	9
	Dontition of the adgas of the	Toothed	50
	L osf	Finely crenellated	31
		Absent	19
		Apparent	44
	Nervation —	Slightly Apparent	56
		Dark Green	56
	LeafColor	Green	41
		Vallowish Crear	41
		Y ellowish Green	3
		Green	25
		Yellowish Green	25
		Brown	16
	Petiole Color	Green-Marron	16
	—	Pink	9
	—	Green, pink	6
	—	Pink, brown	3
Hafer Eiemal	Shape of the Tree	Spread	100
Huror Ejonnur	Tree Vigour	Raise	100
	Anicele Prench	This	100
		1 IIIs	100
	Ramification Level	Dense	100
	Color of Branches	Brown	100
	Number of Leaves Pershoot	4-8	100
A CONTRACTOR OF A CONTRACTOR O	Skin Color	Green	100
	Shana of Emit	Bell	75
a second seco	Shape of Fruit	Rounded	25
		Yellow	63
	Color Ostioles	Red	25
		Transparent	12
		Fnlarged	75
	Shape of Pedencule —	Short and Thick	25
A AND A AND A A A A A A A A A A A A A A		Easy	63
	Easy of Peeling —	Easy	03
		Medium	38
		Absent	50
	Fruit Skin Craks	Cracks Minutes	25
		Rare	25
	Firmness of the Fruit Skin	Medium	63
		Farm	38
		Many	75
	Lenticel	Rare	13
	_	Medium	12
		Pink	50
	Color Lenticel —	White	50
		Strong	50
	Fruit Flavor	Aromatic	25
		Little	25
			42
	Leaf Shape —	в	42
	· · · r ·	E	58
	Number of Lobes —	3 Lobes	67
		5 Lobes	33
	Central Lobe Shape	Spatulated	83
	Central Lobe Shape —	Launched	17
Carl Carlos and	shape of Leaf Base —	Truncated	83
		Cordate	17
And the second se		Cordate	1/

		Finely Crenellated	62
	Dentitions	Absent	23
		Toothed	15
		Effective	58
	Nervation –	Slightly Apparent	42
		Signity Apparent	42
		Green	/5
	Leaf Color	Dark Green	17
		Yellowish Green	8
		Yellowish Green	58
	-	Green	17
	Petiole Color —	Brown	17
	<u> </u>	Pink	8
L			0
Imported 01	Shape of the 1 fee	Open	100
(Khadra baraniya)	Tree Vigour	Intermediate	100
	Apicale Branch	Absent	100
	Demification Land	Intermediate	60
	Ramification Level —	Dense	40
	Color of Branches	Grev	100
		4-8	80
	Number of Leaves Pershoot –	0.12	20
the state of the s		9-12	20
and the second sec	at a 1	Green	07
A STATISTICS CONTRACTOR	Skin Color	green, brown	17
		purple worm	17
NOT BEALL	Shape of Eruit	Bell	83
	Shape of Fruit —	Rounded	17
		Pink	85
Constant of the second s	Color Ostioles —	Red	15
		Enlarged	66
	Shape of Pedencule —	short and thick	44
A Statement		Short and thick	44
and the second second second		Medium	67
and the second second	Easy of Peeling	Easy	17
and the second se		Hard	17
A DESCRIPTION OF A DESC	Ernit Skin Croke	Rare	80
La seconda de la seconda d	Fruit Skill Claks —	Absent	6
		Medium	45
and the second se	Firmness of the Fruit Skin	Sweet	33
· All Address of the other of the		Farm	22
	Lentinel	Marrie	100
	Lenticei	Many	100
11	Lenticel Color —	Pink	35
		White	65
		Little	67
	Fruit Flavor	Aromatic	17
	—	Neutral	17
		D	36
	—	 	32
	Leaf Shape —	E E	22
	- -		23
			<u> </u>
	_	5 lobes	70
	Number of Lobes —	3 lobes	15
1- Carlos /		4 lobes	10
		6 lobes	5
		Spatulated	86
And the second second	Central Lobe Shape –	Linear	14
		Truncated	40
	Shara of Loof Door	i runeated	
	Shape of Leaf Base	auficule	30
		roped	24
	Dentitions —	finely crenellated	60
THE ADDRESS OF THE	Dentitions	Toothed	40
	Namatian	Slightly apparent	82
		Effective	19
		vellowish green	54
	Leat Color —	Green	46
		vellouish groop	29
	Datials Calar		15
	retiole Color	Brown	15
		Pink	5
Imported 02	Shape of the Tree	Semi-discarded	80
(Bayda espangiol)	Shupe of the Tiee	Open	20
	Tree Vigour	Lows	60

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	Intermediate	40
Apicale Branch	This	100
Ramification Level	Intermediate	100
Color of Branches	Grev black	100
Number of Leaves Pershoot	4-8	80
	Green	78
Skin Color	green mauve	22
	Bounded	50
Form -	D-11	
	Dell X II	41
	1 ellow	45
Color Ostioles	Pink	35
	1 ransparent	20
Shape of Pedencule	Enlarged	52
	Short and thick	47
_	Medium	35
Easy of Peeling	Easy	35
	Hard	29
Empit Skin Chalca	Absence	65
FILLI SKIII CIAKS	minutes of cracks	20
	Sweet	47
Firmness of the Fruit Skin	Farm	29
-	Medium	24
	Manv	88
Lenticel	Medium	6
	Rare	6
	Dink	94
Lenticel Color	White	6
	Neutral	59
Fruit Flavor	Little	41
	Little	41
T COL	<u> </u>	40
Leaf Shape	E	40
	H	20
	1 lobe	45
Number of Lobes	5 lobes	27
	3 lobes	27
	Spatulated	66
Central Lobe Shape	Lanceolate	26
	Linear	7
Shape of Leaf Base	Truncated	100
1	Absence	47
Dentitions	finely crenellated	33
	Toothed	20
	Effective	78
Nervation	Inapparent	17
i ver varion	Slightly apparent	6
	derk groop	18
LoofColor	ualk green	48
	Crean	29
	Green	24
	Green	30
Petiole Color	r ellowish green	38
	Brown, green	6
Shape of the Tree	Semi-discarded	100
Tree Vigour	Lows	60
	Intermediate	40
Apicale Branch	Absent	100
Ramification Level	Intermediate	100
Color of Branches	Grey	100
Number of Leaves Pershoot	9-12	100
	Brown, green	38
-	Purple	24
Skin Color	Black	24
	Mauve green	9
-	Green black	5
	Dound	52
Shana of Errit	Dall	33
Shape of Fruit		44
	- Oval	3
Color Ostioles	Pink	88
	Black	12



(chetoui espaniol brunette)		Courty ard and thick	71
-	Shape of Pedencule	Long and thin	15
		Enlarged	15
		Elitargeu	15
	_	Easy	44
	Easy of Peeling	Medium	35
		Hard	21
		Absence	53
	Emit Strin Cooles	Bara	29
		Kale	30
		minutes of cracks	9
		Medium	44
		Farm	32
	Firmnesse of the Fruit Skin —	Sweet	21
	—	Bill	2
		Rubber	3
		Many	79
	Lenticel	Medium	18
	—	Rare	3
		Dial	3
	Lenticel Color —	Pink	97
	Lentreel color	White	3
		Aromatic	57
	—	Strongflavour	19
	Fruit Flavor —	Strong Havour	19
		Little flavour	16
		Neutral	8
		Е	64
	—	 	21
	Shape of Leaf —		21
	·	F	1
		Α	7
		3 lobes	93
	Number of Lobes —	5 lobes	7
		5 100es	1
		Spatulated	86
	Central Lobe Shape	Linear	7
		Lanceolate	7
		Truncated	85
	a (1 (b) —	I fullcated	85
	Shape of Leaf Base	Auriculated	/
		roped	7
		finely crenellated	36
	Dentitions	Toothed	36
	Dentitions	Abaaraa	30
		Absence	29
	Nervation	Slightly apparent	71
		Inapparente	29
		Green	57
	Leaf Color —	dark groon	42
A DECEMBER OF		dark green	43
		Green	54
		yellowish green	15
	—	Brown, green	15
	Detiels Celer	,6	-
	Petiole Color		
CONTRACTOR OF THE OWNER OF THE		Brown	
Carrier Contraction		DIOWI	
ALC: NOT A CONTRACT OF A CONTR			15
Lenge entre 104	Shan a af tha True	0	100
imported 04	Shape of the Tree	Open	100
(chetou espaniol)	Tree Vigour	Intermediate	80
		Raise	20
		Absent	60
	Apicale Branch —	This	A
		1 1115	4
	Ramification Level	Separate	100
Philip Contraction		Intermediate	20
		Grey	80
A Company of the second s	Color of Branches —	Grev black	20
All and a second se	Number of Learner Der Chart	4 Q	100
A STATE OF A	Number of Leaves Per Shoot	4-0	100
		Green	56
		Brown	22
a state of the sta	Skin Color —	Green brown	17
	<u> </u>	Manua brown	6
		Iviauve, orown	0
		Rounded	44
	Shape of Fruit	Bell	44
		Oval	11
		Dink	70
	Color Ostioles —	r ilik	
		Yellow	17

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Shape of Pedencule

Easy of Peeling

Fruit Skin Craks

Firmnesse of Fruit Skin

A DECEMBER OF A
AND A SECONDERING AND A HER
Passing and the second s

	Sweet	6
	Many	61
Lenticel	Medium	38
	Pink	94
Lenticel Color	White	6
Fruit Flavor	Aromatic	44
i fuit i fuvor	Little flavor	39
	Strongflavor	17
	C	31
	E	25
Shana af Laaf		10
Snape of Leaf	B	19
	<u>D</u>	13
	A	13
Number of Lobes	3 lobes	69
	5 lobes	31
	Spatulated	75
Central Lobe Shape	Linear	19
	Lanceolate	6
	Auriculated	69
Shape of Leaf Base	Haste	19
	Corded	13
	Absence	38
Dentitions	finely crenellated	31
	Toothed	31
	Slightly apparent	44
Nervation	Inapparente	38
	Effective	19
	dark green	56
Leaf Color	Green	44
	Green	69
Petiole Color	vellowish green	31
Shape of the Tree	Open	100
	Intermediate	100
Anicale Branch	Absent	100
Pamification Level	Intermediate	100
Rainfication Level	Crow	80
Color of Branches	Gley	80
Number of Lease D. C.	t 0.12	20
Number of Leaves Per Shoo	ι 9-12	100
	Green mauve	50
Skin Color	Black-mauve-green	29
	Green	15
Shape of Fruit	Bell	73
	Rounded	27
	Transparent	41
	Pink	32
Color Ostioles	Yellow	12
	Black	9
	Red	6
	Enlarged	44
Shape of Pedencule	Short and thick	29
·····	Long and thin	26
	Easy	50
Fasy of Peeling	Medium	38
Lasy 011 cening	Hard	12
	Absence	01
Fruit Skin Craks	Auselice	91
	minutes of cracks	9

Transparent Short and thick Enlarged Long and thin

Easy Medium Hard

Absence

minutes of cracks

Rare Farm Medium 6 44

39 17

67

28 6

50

33 17

61

33

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Print	S.
	1

	Medium	53
Firmnesse of the Fruit Skin	Farm	24
	Sweet	18
	Rubber	6
	Many	50
Lenticel	Medium	44
	Rare	6
Lenticel Color	Pink	65
_	White	35
	Aromatic	50
Fruit Flavor	Little flavor	44
—	Neutral	6
	D	50
Shara af Laaf	С	20
Snape of Lear —	E	20
—	В	10
	3 lobes	50
Number of Lobes	5 lobes	44
—	4 lobes	6
Central Lobe Shape	Spatulated	72
	Linear	22
—	Lanceolate	6
Change of Leaf Dage	Truncated	61
Shape of Leaf Base —	Corded	39
	finely crenellated	44
Dentition	Absence	39
—	Toothed	17
NT	Slightly apparent	67
Nervation —	Effective	33
Lacola	Green	56
Leaf Color —	dark green	44
	Green	50
—	Yellowish green	28
Petiole Color	Green pink	11
	Green-Marron	6
—	Brown yellow	5
	•	