

# **Morphological Description of Apple Varieties under Agro climatic Conditions of Jammu and Kashmir (Part-1)**

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<b>Coe Red Fuji</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
Accession No. EC-44005			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Reddish Brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Out wards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Short	Fruit: prominence of lobes at calyx end	Absent
Leaf blade: width	Broad	Fruit: bloom of skin	Strong
Leaf blade :ratio length/width	Medium	Fruit: greasiness of skin	Strong
Leaf blade: pubescence on lower side	Moderate	Fruit: over colour	Medium
Leaf blade:intensity of green colour	Dark green	Fruit: pattern of over colour	Only solid flush
Leaf blade: incision of margin (Upper half)	Serrate type -2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit: number of lenticles	Medium
Flower: arrangement of petals	Intermediate	Fruit: colour of flesh	Creamy
Flower: position of Stigmas relative to anthers	Same level	Fruit maturity: Days (DAFB)	Late
Flower: predominant colour at balloon stage	Light pink		

## Coe Red Fuji



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Granny Smith</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
Accession No.EC-638496			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit'	On shoots	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	light brown	Fruit:length of stalk	very Long
Leaf blade:orientation in relation to shoot	Out wards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes at calyx end	Weak
Leaf blade:width	Medium	Fruit:Bloom ofskin	Strong
Leaf blade :ratio length/ width	Medium	Fruit:greasinessof skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Very Small
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Bi-crenate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small/ narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days (DAFB)	Very late
Flower:predominant colour at balloon stage	light pink		

## Granny Smith



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Spartan</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-552624</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Strong
Tree: type	columnar	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark brown	Fruit:length of stalk	very long
Leaf blade:orientation in relation to shoot	outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Broad	Fruit:bloom of skin	Strong
Leaf blade :ratio length /width	Small	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Medium	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type -2	Fruit: area of russet AroundStalkattachment	Small
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmasrelative to anthers	Above	Fruitmaturity: Days (DAFB)	Mid
Flower:predominant colour at balloon stage	Light pink		



## Spartan



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



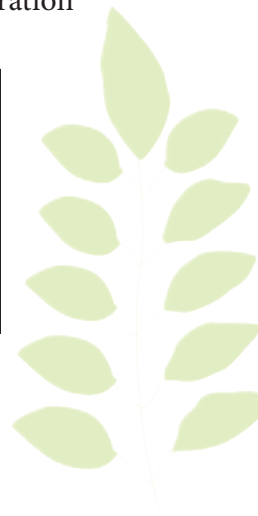
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Vista Bella</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin co- louration	Medium
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Soft</b>
Shoot:colour on one year old, on sunny side	Dark brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Broad	Fruit:Bloom ofskin	Strong
Leaf blade :ratio length/ width	very Large	Fruit:Greasinessof skin	Strong
Leaf blade:pubescence on lowerside	Less/ Weak	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Bi-crenate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Early	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Whitish
Flower:position of Stigmas- relative to anthers	Below	Fruitmaturity: Days (DAFB)	Very early
Flower:predominant colour at balloon stage	light pink		

## Vista Bella



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



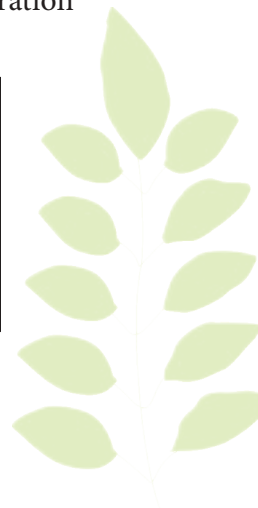
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Fuji</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Downward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Long	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Broad	Fruit:Bloom ofskin	Strong
Leaf blade :ratio length /width	Very Large	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lower-side	Present	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of Over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type -2	Fruit: area of russet around stalk attachment	Strong
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Whitish
Flower:position of Stigmasrelative to anthers	Below	Fruitmaturity:- Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light Pink		

## Fuji



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



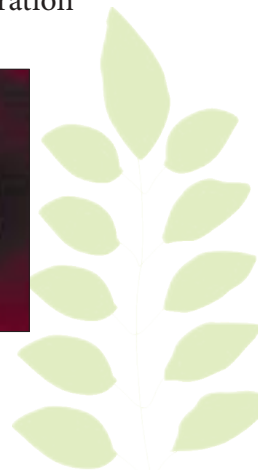
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Starkrimson</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-108179</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	firm
Shoot:colour on one year old, on sunny side	Dark brown	Fruit:length of stalk	Medium
Leaf blade:orientation in relation to shoot	Out wards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Short	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length /width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lower-side	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small/ narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmasrelative to anthers	same level	Fruitmaturity:- Days(DAFB)	Late
Flower:predominant colour at balloon stage	Dark pink		

## Starkrimson



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



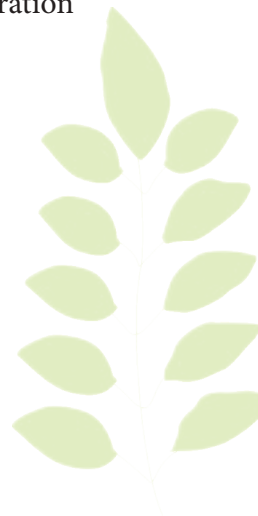
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Mollies Delicious</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-62373</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Extra Large
Tree: habit	Spreading	Fruit: shape	Conical
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	out wards	Fruit: depth of stalk cavity	Deep
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Large	Fruit:bloom ofskin	Moderate
Leaf blade :ratio length / width	very Large	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Moderate
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Weakly defined flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Overlap	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Below	Fruitmaturity:Days(DAFB)	Early
Flower:predominant colour at balloon stage	Dark pink		



## Mollies Delicious



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Cooper- IV</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Tree Characteristics</b>	<b>Staates</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin co- louration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Cylindrical
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	firm
Shoot:colour on one year old, on sunny side	light brown	Fruit:length of stalk	Medium
Leaf blade:orientation in relation to shoot	out wards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes at calyx end	Strong
Leaf blade:width	Medium	Fruit:bloom ofskin	Strong
Leaf blade :ratio length / width	Large	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of mar- gin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	creamy
Flower:position of Stigmas- relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Cooper- IV



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>American Apirouge</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Columnar	Fruit:weight	Small
Tree: habit	Upright	Fruit: shape	Obloid
Bearing habit	Spurs only	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	firm
Shoot:colour on one year old, on sunny side	Medium brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Downwards	Fruit: depth of stalk cavity	shallow
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Absent
Leaf blade:width	Medium	Fruitbloom of skin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	only solid flush
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: areaof russet Around-Stalk attachment	Large
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light Pink		

## American Apirouge



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Silver Spur</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-153986</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Medium
Tree: type	Columnar	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	spurs only	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Light brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Downwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Medium	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Below	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Silver Spur



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Golden Delicious</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-162914</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Broad	FruitBloom ofskin	Moderate
Leaf blade :ratio length / width	Large	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Less/ Weak	Fruit: overcolour	Small
Leaf blade:intensity of green colour	Light green	Fruit:pattern of over colour	only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Strong
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Medium
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Medium</b>
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Dark pink		



## Golden Delicious



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Firdous</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-162914</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	light brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Downward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Present	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Crenate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Mid
Flower:predominant colour at balloon stage	Dark pink		

## Firdous



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Red Fuji</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-513662</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	On shoots	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Medium brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Weak	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Late	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	White		

## Red Fuji



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Red Chief</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-638497</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Conical
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Dark brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Flushed stripes and Mottled
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Red Chief



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Shireen</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-162914</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Ovoid
Bearing habit`	Terminal	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Medium
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Absent
Leaf blade:width	Broad	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Large
Leaf blade:size of stipules	Narrow	Fruit: area of russet on cheeks	Small
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Mid
Flower:predominant colour at balloon stage	Light pink		



## Shireen



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Oregon Spur</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-200813</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Medium
Tree: type	Columnar	Fruit:weight	Large
Tree: habit	Upright	Fruit: shape	Conical
Bearing habit`	Spurs only	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Broad	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	solid flush with Strongly defined stripes
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Below	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Lightpink		

## Oregon Spur



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



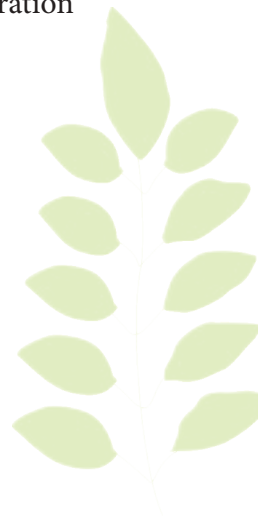
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Royal Delicious</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-552628</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Conical
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Medium
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Medium	Fruitbloom ofskin	Medium
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Medium
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Bicrenate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Late	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Royal Delicious



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



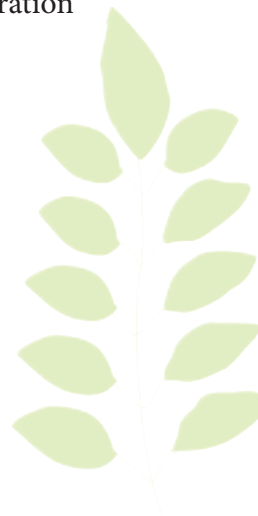
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Red Gold</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No. EC-328842</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Uutward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Broad	Fruitbloom ofskin	Medium
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Weak
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Yellowish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Red Gold



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Red Delicious</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-451348</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Cylindrical
Bearing habit`	Terminal	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Medium	Fruitbloom of skin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Flushed stripes and mottled
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Early	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		



## Red Delicious



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>King Luscious</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-027802</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Very Large
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Absent
Leaf blade:width	Broad	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Medium
Leaf blade:pubescence on lowerside	Less	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Flushed stripes and Mottled
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Mid
Flower:predominant colour at balloon stage	Light Pink		

## King Luscious



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



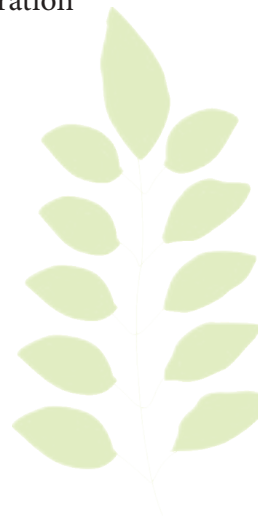
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



EC- 83683			
Genus-Species: <i>Malus domestica</i> Borkh			
Accession No.EC-			
Tree Characteristics	States	Fruit Characteristics	States
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
Leaf Characteristics	States	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Reddish Brown	Fruit:length of stalk	Medium
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Moderate
Leaf blade:width	Broad	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Green	Fruit:pattern of over colour	Solid Flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Absent
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
Inflorescence characteristics	States	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Mid
Flower:predominant colour at balloon stage	Dark pink		

## EC- 83683



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



EC- 539449			
Genus-Species: <i>Malus domestica</i> Borkh			
Accession No.EC-			
Tree Characteristics	States	Fruit Characteristics	States
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Medium
Tree: type	Columnar	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	Spurs	Fruit: size of eye basin	Large
Leaf Characteristics	States	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Light Brown	Fruit:length of stalk	Very Large
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Moderate
Leaf blade:width	Broad	Fruitbloom ofskin	Medium
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Flushed And Mottled
Leaf blade:incision of margin (Upper half)	Serrate type 1	Fruit: area of russet around stalk attachment	Strong
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
Inflorescence characteristics	States	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Mid
Flower:predominant colour at balloon stage	Light pink		

## EC- 539449



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



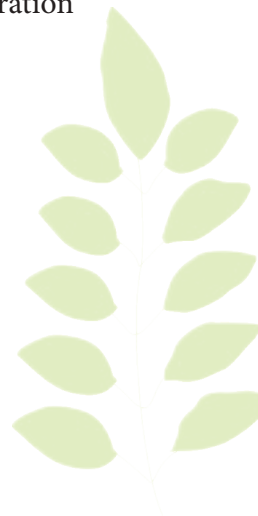
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



EC-539457			
Genus-Species: <i>Malus domestica</i> Borkh			
Accession No.EC-			
Tree Characteristics	States	Fruit Characteristics	States
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Cylindrical Wasted
Bearing habit`	Mixed	Fruit: size of eye basin	Large
Leaf Characteristics	States	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of stalk	Medium
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Broad	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Weak
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 1	Fruit: area of russet around stalk attachment	Absent
Leaf blade:size of stipules	Broad/Large	Fruit: area of russet on cheeks	Absent
Inflorescence characteristics	States	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Overlapping	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Mid
Flower:predominant colour at balloon stage	Light pink		



## EC-539457



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



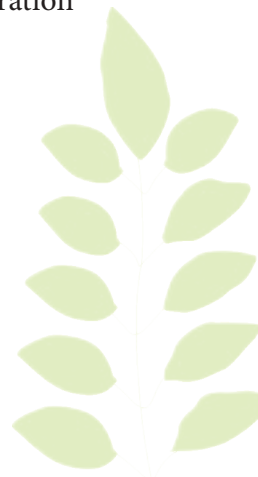
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Starkrimson Gold</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Strong
Tree: type	Columnar	Fruit:weight	Small
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Spur	Fruit: size of eye basin	Small
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish Brown	Fruit:length of stalk	Medium
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Absent
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Less/Weak	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small /Narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Early	Fruit:number of lenticels	Few
Flower:arrangement of petals	Overlap	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	White		

## Starkrimson Gold



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Jonica</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Terminal	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Downward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	LightGreen	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small /Narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Yellowish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Jonica



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Mayan</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-043639</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Light Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Moderate
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	crenate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Early	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Early
Flower:predominant colour at balloon stage	Light pink		

## Mayan



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



EC-539450			
Genus-Species: <i>Malus domestica</i> Borkh			
Accession No.EC-			
Tree Characteristics	States	Fruit Characteristics	States
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
Leaf Characteristics	States	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Light brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Narrow	Fruitbloom ofskin	Weak
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Small
Leaf blade:intensity of green colour	Green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	crenate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	very Small	Fruit: area of russet on cheeks	Absent
Inflorescence characteristics	States	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Free	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Dark pink		



## EC-539450



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



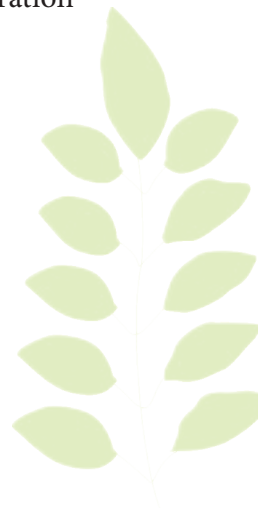
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Tallisare</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-057504</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Small
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet Around-Stalkattachment	Medium
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Free	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Dark pink		

## Tallisare



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Lemon Guard</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	medium
Tree: type	Ramified	Fruit:weight	Small
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish Brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Moderate
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Small
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small /narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Lemon Guard



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



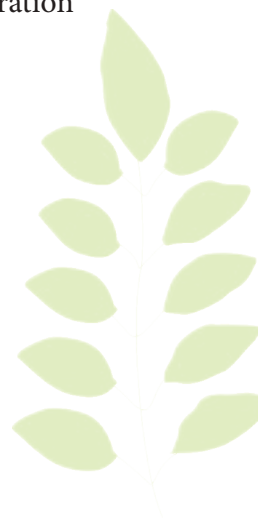
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Black Ben Davis</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-036439</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 1	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermidate	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Below	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light Pink		

## Black Ben Davis



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>June Eating</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	reddish brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Medium	Fruitbloom ofskin	Weak
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Very Small
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Only Solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Early	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Yellowish
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Very Early
Flower:predominant colour at balloon stage	Light pink		



## June Eating



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



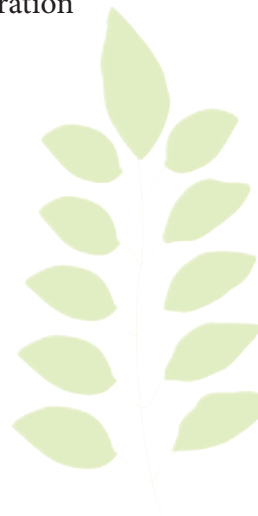
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Red Baron</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No. EC-115820</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Spurs only	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Downward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Darkgreen	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 1	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Late	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Mid
Flower:predominant colour at balloon stage	Dark pink		

## Red Baron



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



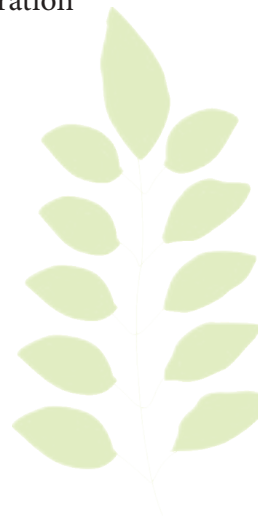
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Lal Ambri</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	upright	Fruit: shape	Conic
Bearing habit`	On shoots	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of st alk	Very long
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Deep
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Medium	Fruitbloom ofskin	Medium
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Broad/Large	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Lal Ambri



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Ambri</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.IC-538528</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	upright	Fruit: shape	Ovoid
Bearing habit`	On shoots	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Downward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Medium
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Green	Fruit:pattern of over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Strong
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Free	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Ambri



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Winter Commercial</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Weak
Tree: type	Columnar	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	On spurs	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Light Brown	Fruit:length of stalk	very long
Leaf blade:orientation in relation to shoot	Downward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Light Green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Biseraate	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Small/ narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Free	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Very late
Flower:predominant colour at balloon stage	Dark pink		



## Winter Commercial



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Green Sleeves</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Medium
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Strong
Leaf blade:intensity of green colour	dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Dark pink		

## Green Sleeves



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Rome Beauty</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-127111</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish Brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	downwards	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Medium
Leaf blade :ratio length/ width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet Around-Stalkattachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Small</b>
Onset of flowering	Late	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Rome Beauty



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Well Spur</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-200360</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Weak
Tree: type	Columnar	Fruit:weight	Medium
Tree: habit	Upright	Fruit: shape	Conic
Bearing habit`	On spurs	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Narrow	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Crenate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Sam level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Well Spur



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



EC- 539452			
Genus-Species: <i>Malus domestica</i> Borkh			
Accession No.IC-349911			
Tree Characteristics	States	Fruit Characteristics	States
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	On spurs	Fruit: size of eye basin	Large
Leaf Characteristics	States	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Light Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Narrow	Fruitbloom ofskin	Small
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Small
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Small
Leaf blade:intensity of green colour	dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	biserrate	Fruit: area of russet around stalk attachment	Strong
Leaf blade:size of stipules	medium	Fruit: area of russet on cheeks	Small
Inflorescence characteristics	States	Fruit: area of russet around eye basin	Small
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		



## EC- 539452



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Wealthy Apple</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish Brown	Fruit:length of stalk	Medium
Leaf blade:orientation in relation to shoot	Downwards	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Absent
Leaf blade:width	Medium	Fruitbloom ofskin	Weak
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Crenate	Fruit: area of russet around stalk attachment	Weak
Leaf blade:size of stipules	Small/ narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Below	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Wealthy Apple



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



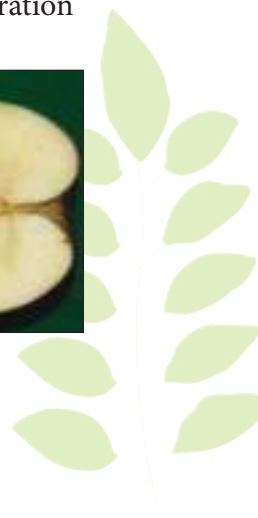
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Star Summer Gold</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Mdium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Flushed stripes and mottled
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small/narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Small</b>
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Below	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Star Summer Gold



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Starking Delicious</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-027794</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Shot	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 1	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Overlapping	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Starking Delicious



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Top Red</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Upward	Fruit: depth of stalk cavity	Deep
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Darkgreen	Fruit:pattern of over colour	Strongly defined stripes
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Small /Narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Dark pink		



## Top Red



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Tydemans Early Worcester</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-044005</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Terminal	Fruit: size of eye basin	Small
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Light brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Narrow	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width		Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Light green	Fruit:pattern of over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 1	Fruit: area of russet around stalk attachment	Absent
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Below	Fruitmaturity:Days(DAFB)	Early
Flower:predominant colour at balloon stage	Light pink		

## Tydeman's Early Worcester



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Benoni</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Small
Tree: habit	Upright	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Small
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Light Brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length/ width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid Flesh with weakly Defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 1	Fruit: area of russet around stalk attachment	Absent
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Early	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Early
Flower:predominant colour at balloon stage	Light pink		

## Benoni



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Pink Lady</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No. EC-802377</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Ellipsoid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Broad	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Light green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Medium	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Dark pink		

## Pink Lady



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Hardiman</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh)</b>			
<b>Accession No.IC-558033</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Medium	Fruitbloom ofskin	Medium
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Medium
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		



## Hardiman



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Luxtone Fortune</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-044007</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Conical
Bearing habit`	Mixed	Fruit: size of eye basin	Small
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Weak
Leaf blade :ratio length / width	Large	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Light green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Absent
Leaf blade:size of stipules	Verysmall	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Free	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Very Early
Flower:predominant colour at balloon stage	Light pink		

## Luxtone Fortune



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Prima</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Upward	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Moderate
Leaf blade:width	Medium	Fruitbloom ofskin	Weak
Leaf blade :ratio length / width	Large	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Moderate
Leaf blade:intensity of green colour	Darkgreen	Fruit:pattern of over colour	Weakly defined flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Absent
Leaf blade:size of stipules	Large	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Early	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Prima



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Summer Red</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No. EC-144036</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Ellipsoid
Bearing habit`	Spurs only	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Reddish brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Weak
Leaf blade :ratio length / width		Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Above	Fruitmaturity:Days(DAFB)	Early
Flower:predominant colour at balloon stage	Light pink		

## Summer Red



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Rich-a-Red</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.IC-566156</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Dark Brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Upward	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Short	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Large	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with strongly Defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Intermidate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		



## Rich-a-Red



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Scarlet Gala</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.IC-566169</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Reddish brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Narrow	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Large	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Strong
Leaf blade:intensity of green colour	Dark Green	Fruit:pattern of over colour	Flushed and mottled
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Overlapped	Fruit:colour of flesh	Whitish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Mid
Flower:predominant colour at balloon stage	Dark pink		

## Scarlet Gala



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



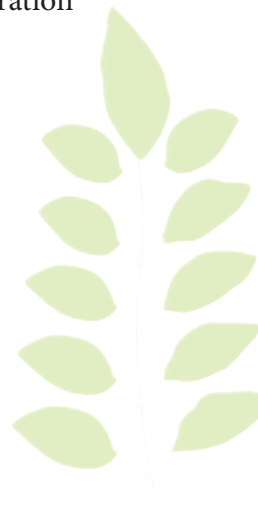
Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Michal</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-043637</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outward	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Serrate type 1	Fruit: area of russet around stalk attachment	Absent
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Early	Fruit:number of lenticels	Weak
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Early
Flower:predominant colour at balloon stage	Lightpink		

## Michal



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>MC-Spur</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-115908</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:Anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Small
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Absent
Leaf blade:width	Narrow	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	High	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Crenate	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Few
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Red		

## MC-Spur



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Florina</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Small
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Light brown	Fruit:length of stalk	Very Long
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Narrow	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Medium
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Medium
Leaf blade:intensity of green colour	Light green	Fruit:pattern of over colour	Solid flush with weakly defined stripes
Leaf blade:incision of margin (Upper half)	Crenate	Fruit: area of russet around stalk attachment	Strong
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Mid
Flower:predominant colour at balloon stage	Light pink		



## Florina



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Anna</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-100218</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Small
Tree: habit	Spreading	Fruit: shape	Cylindrical
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	Fruit:firmness of flesh	Firm
Shoot:colour on one year old, on sunny side	Light Brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Deep
Leaf blade:length	Short	Fruit:prominence of lobes atcalyx end	Medium
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Moderate
Leaf blade:pubescence on lowerside	Less/ weak	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Light green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Biserrate	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Absent	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	Fruit: area of russet around eye basin	Absent
Onset of flowering	Early	Fruit:number of lenticels	Medium
Flower:arrangement of petals	Free	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Early
Flower:predominant colour at balloon stage	Light pink		

## Anna



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Vance Delicious</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-552612</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Weak
Tree: type	Ramified	Fruit:weight	Large
Tree: habit	Spreading	Fruit: shape	Conic
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Upwards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Strong
Leaf blade:width	Medium	Fruitbloom ofskin	Medium
Leaf blade :ratio length/ width	Medium	Fruit:greasiness of skin	Medium
Leaf blade:pubescence on lowerside	Absent	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Solid flush with strongly defined stripes
Leaf blade:incision of margin (Upper half)	Crenate	Fruit: area of russet Around-Stalkattachment	Small
Leaf blade:size of stipules	Small/ narrow	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Vance Delicious



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Antonovka</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Obloid
Bearing habit`	On shoots	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Light Brown	Fruit:length of stalk	Long
Leaf blade:orientation in relation to shoot	Downwards	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Medium	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet Around-Stalkattachment	Medium
Leaf blade:size of stipules	Broad/Large	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Mid	Fruit:number of lenticels	Many
Flower:arrangement of petals	Free	Fruit:colour of flesh	Greenish
Flower:position of Stigmas-relative to anthers	Below	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## Antonovka



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>M. floribunda</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Medium	Fruit let:anthocyanin colouration	Strong
Tree: type	Ramified	Fruit:weight	Small
Tree: habit	Spreading	Fruit: shape	Ellipsoid
Bearing habit`	Mixed	Fruit: size of eye basin	Medium
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Medium Brown	Fruit:length of stalk	Medium
Leaf blade:orientation in relation to shoot	Outwards	Fruit: depth of stalk cavity	Shallow
Leaf blade:length	Medium	Fruit:prominence of lobes atcalyx end	Weak
Leaf blade:width	Narrow	Fruitbloom ofskin	Strong
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Strong
Leaf blade:pubescence on lowerside	Less/ weak	Fruit: overcolour	Large
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 2	Fruit: area of russet around stalk attachment	Small
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Late	Fruit:number of lenticels	Few
Flower:arrangement of petals	Overlap	Fruit:colour of flesh	Pinkish
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Purple		



## *M. floribunda*



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape



Fruit: colour of flesh



<b>Malus baccata</b>			
<b>Genus-Species: <i>Malus domestica</i> Borkh</b>			
<b>Accession No.EC-558038</b>			
<b>Tree Characteristics</b>	<b>States</b>	<b>Fruit Characteristics</b>	<b>States</b>
Tree : vigour	Strong	Fruit let:anthocyanin colouration	Medium
Tree: type	Ramified	Fruit:weight	Medium
Tree: habit	Spreading	Fruit: shape	Globose
Bearing habit`	Mixed	Fruit: size of eye basin	Large
<b>Leaf Characteristics</b>	<b>States</b>	<b>Fruit:firmness of flesh</b>	<b>Firm</b>
Shoot:colour on one year old, on sunny side	Light brown	Fruit:length of stalk	Very long
Leaf blade:orientation in relation to shoot	Out wards	Fruit: depth of stalk cavity	Medium
Leaf blade:length	Broad	Fruit:prominence of lobes atcalyx end	Small
Leaf blade:width	Medium	Fruitbloom ofskin	Moderate
Leaf blade :ratio length / width	Medium	Fruit:greasiness of skin	Weak
Leaf blade:pubescence on lowerside	Moderate	Fruit: overcolour	Weak
Leaf blade:intensity of green colour	Dark green	Fruit:pattern of over colour	Only solid flush
Leaf blade:incision of margin (Upper half)	Serrate type 1	Fruit: area of russet around stalk attachment	Medium
Leaf blade:size of stipules	Very Small	Fruit: area of russet on cheeks	Absent
<b>Inflorescence characteristics</b>	<b>States</b>	<b>Fruit: area of russet around eye basin</b>	<b>Absent</b>
Onset of flowering	Early	Fruit:number of lenticels	Few
Flower:arrangement of petals	Intermediate	Fruit:colour of flesh	Creamy
Flower:position of Stigmas-relative to anthers	Same level	Fruitmaturity:Days(DAFB)	Late
Flower:predominant colour at balloon stage	Light pink		

## *Malus baccata*



Tree vigour



Bearing habit



Intensity of green colour



Incision of margin



Arrangement of petals



Fruitlet: anthocyanin colouration



Fruit : shape

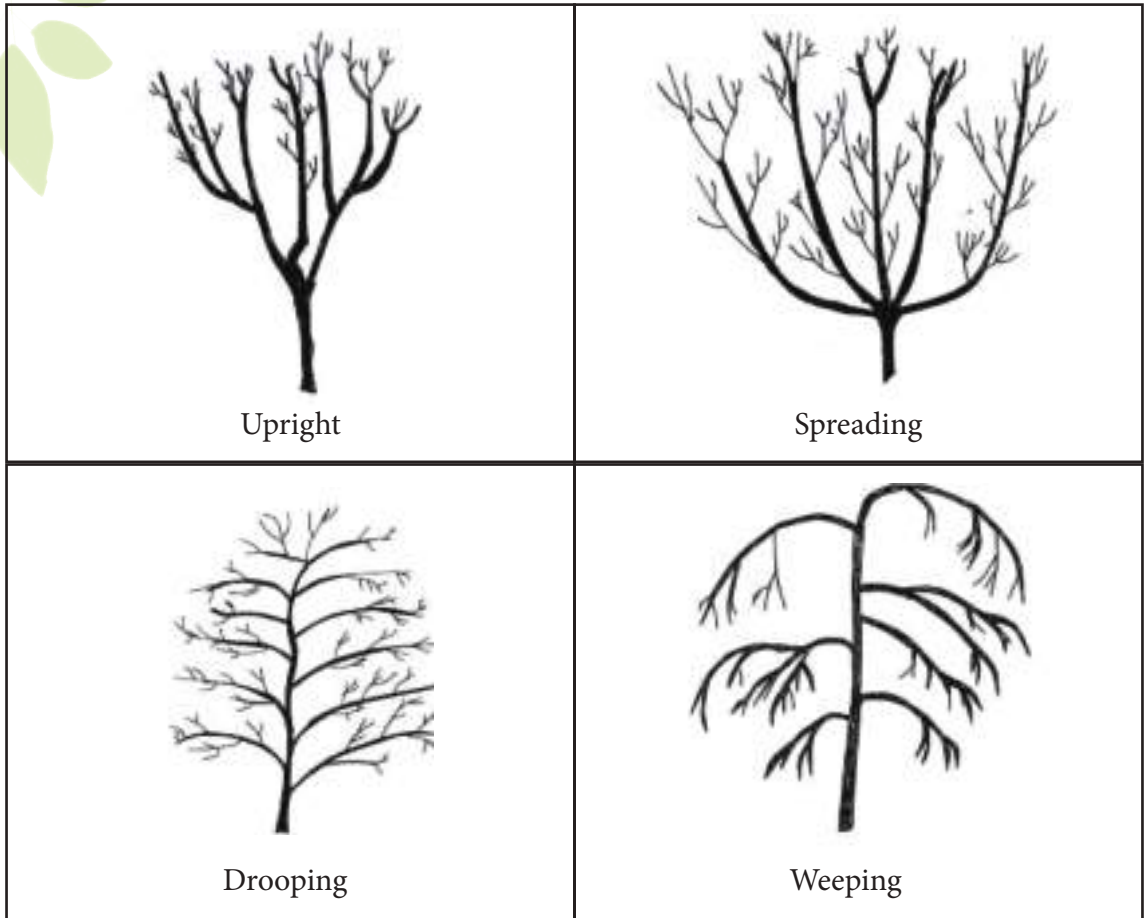


Fruit: colour of flesh

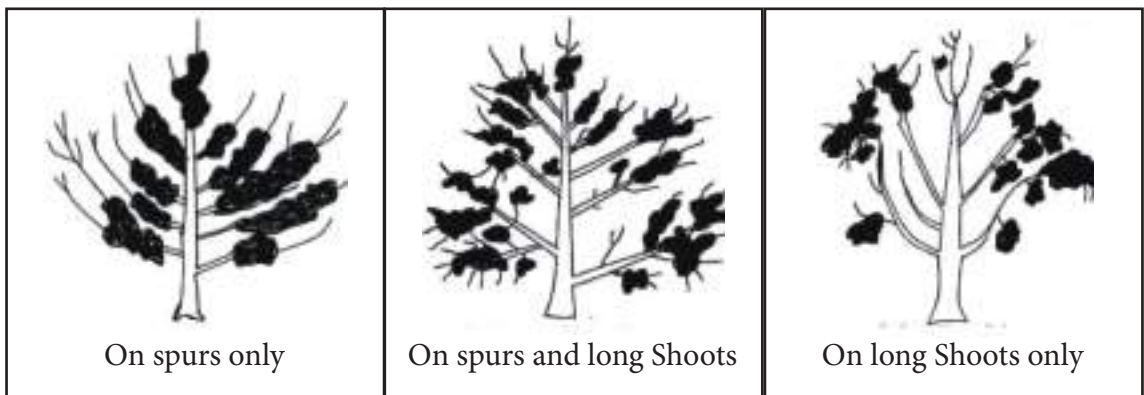


Explanations on the table of characteristics

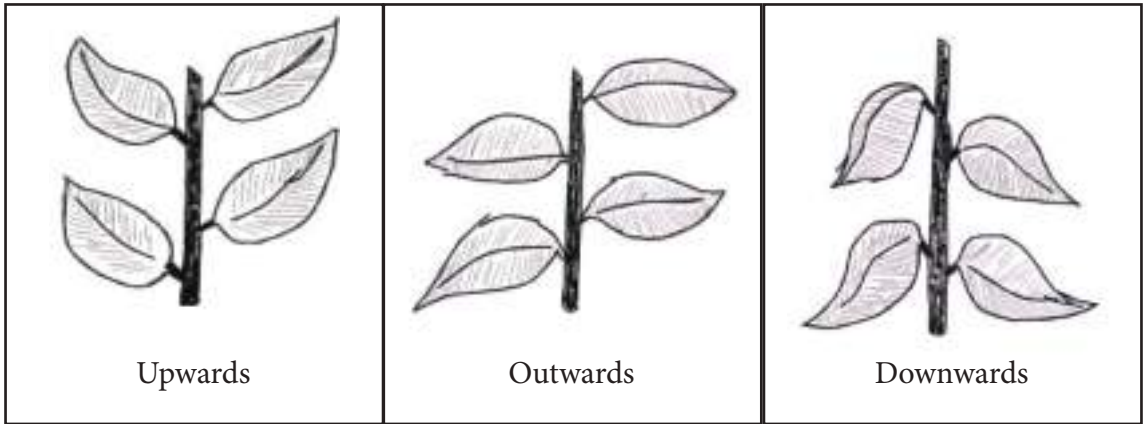
Tree habit



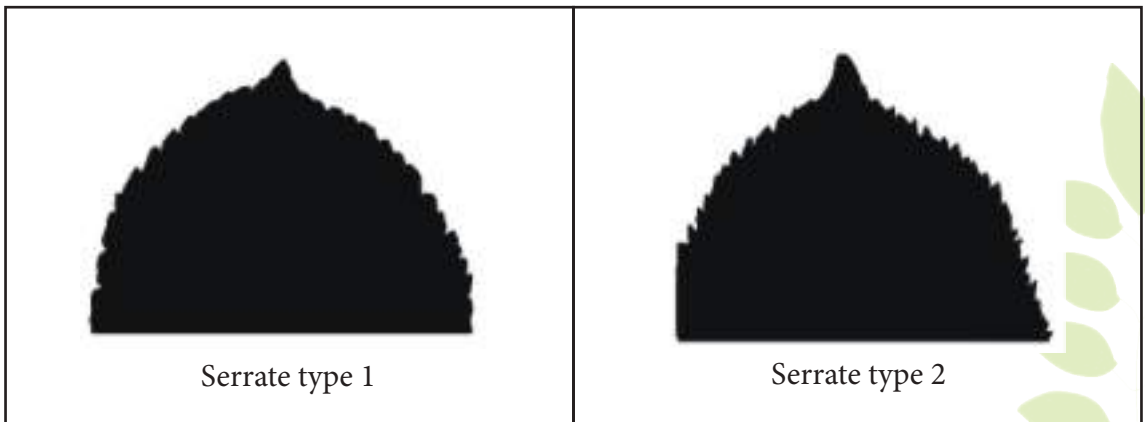
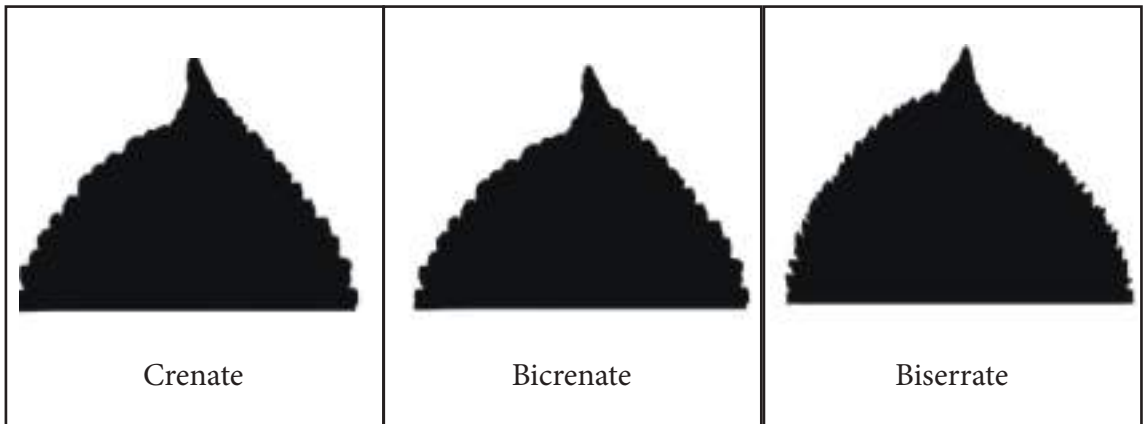
Type of bearing habit



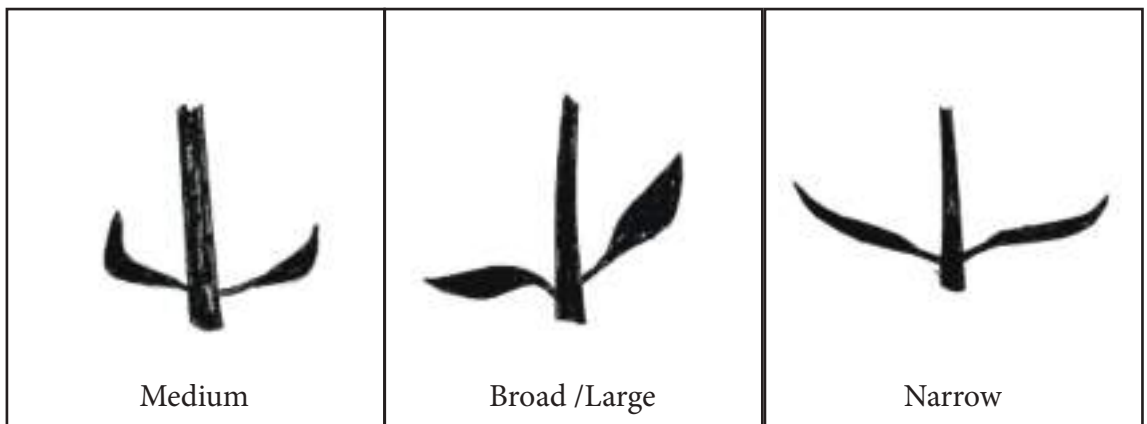
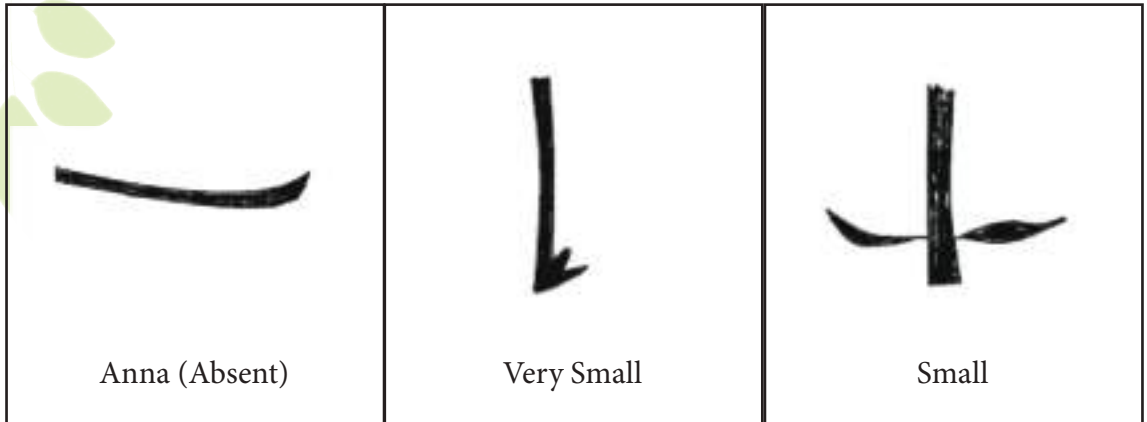
Leaf Blade; altitude in relation to shoot



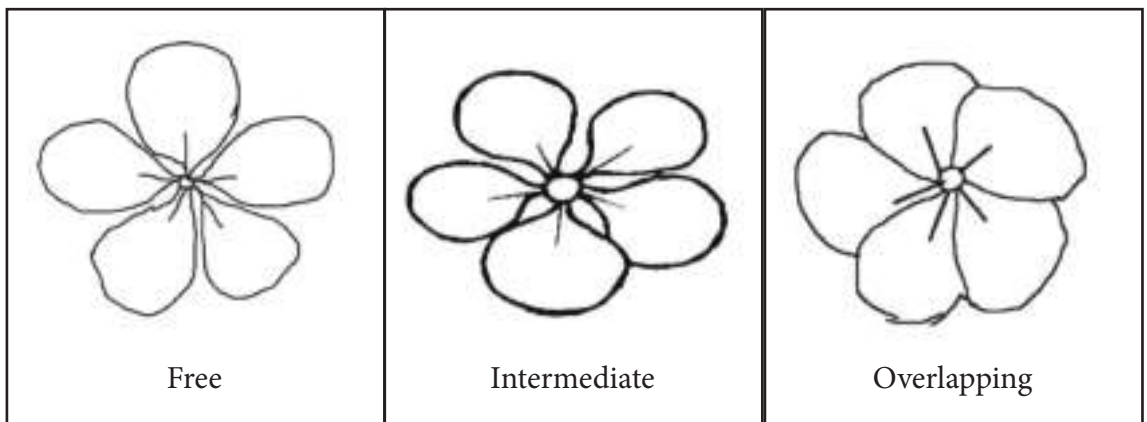
Leaf blade: incision of margin upper half



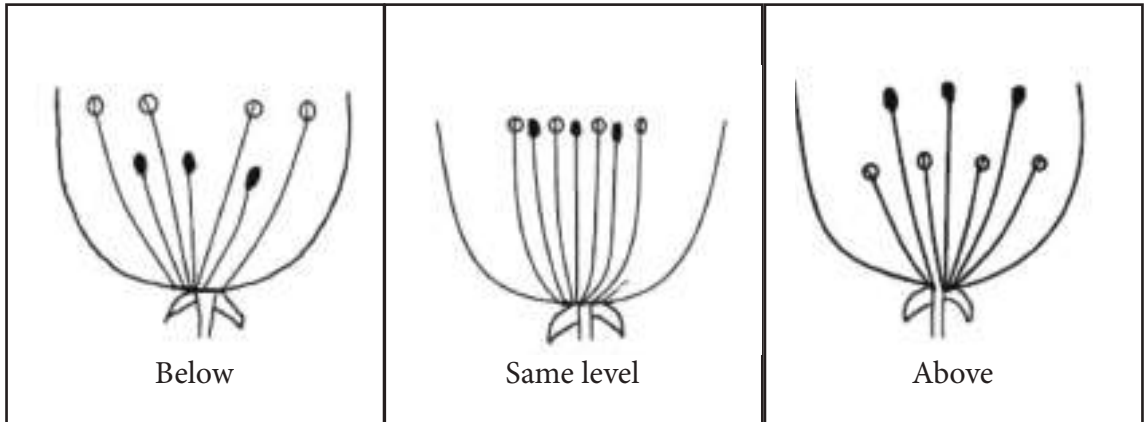
Size of stipules



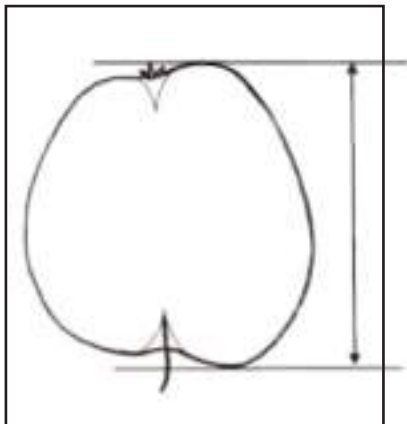
Characteristics 16: flower – arrangement of petal



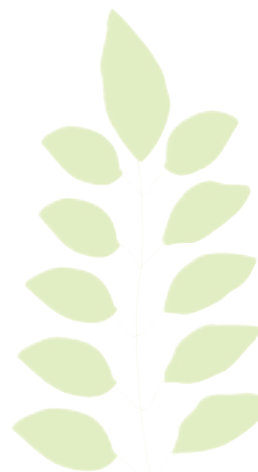
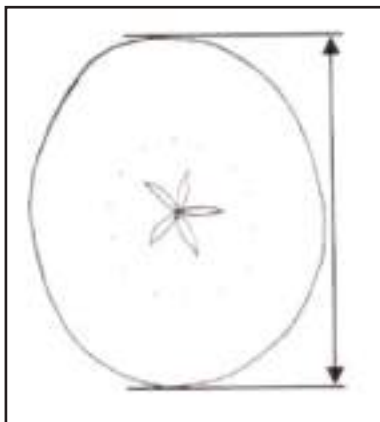
Flower: position of stigma in relation to anthers



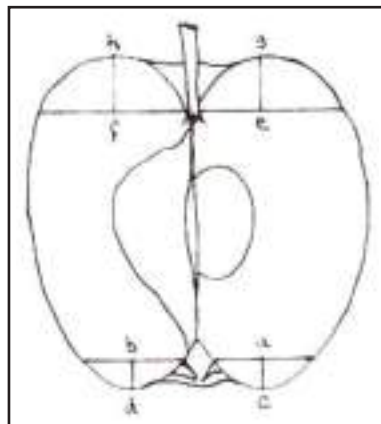
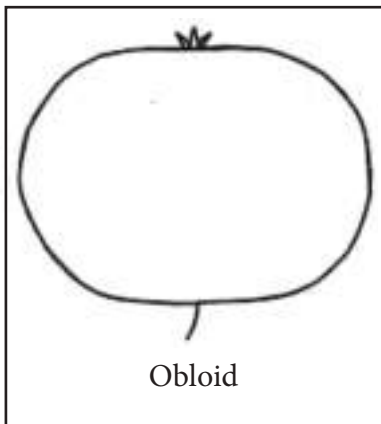
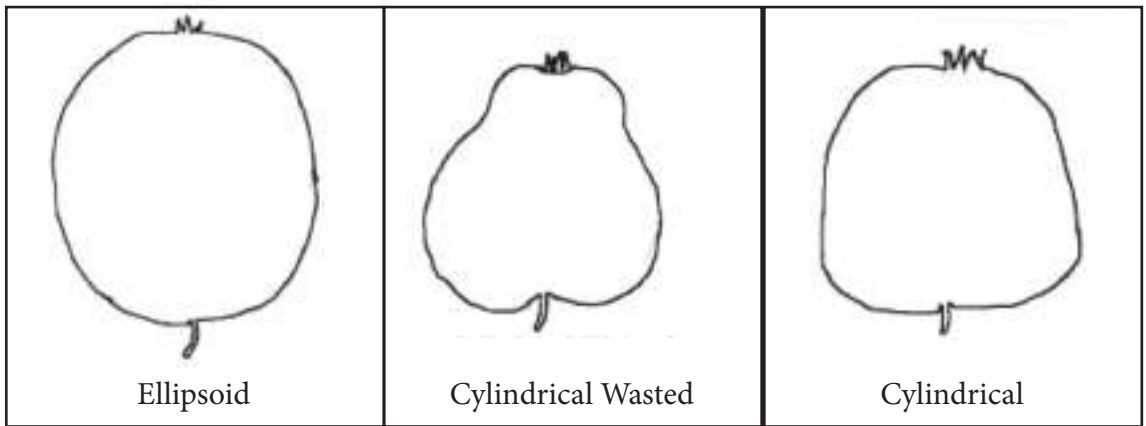
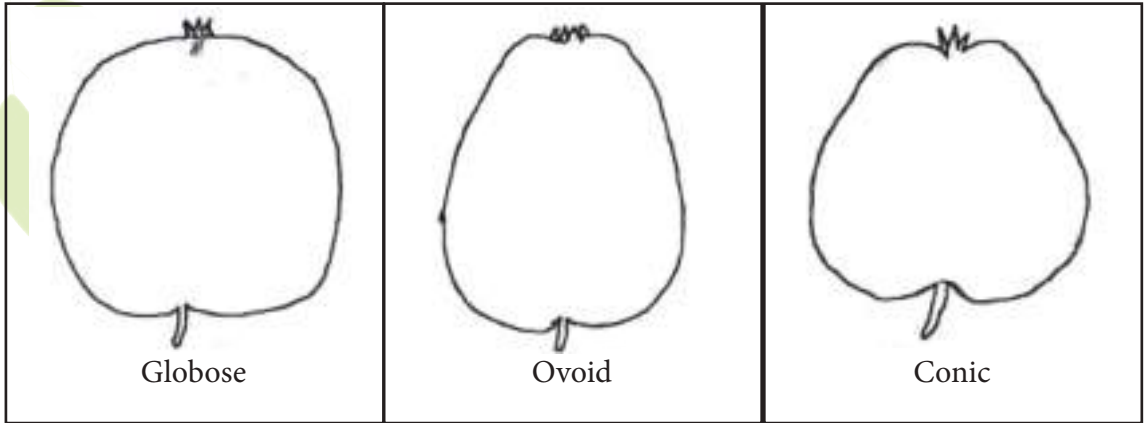
Fruit height



Fruit diameter



### Fruit general shape





States of different characteristics		
S.No.	Characteristics	States
1	Tree: vigor	weak
		medium
		strong
2	Tree: type	columnar
		ramified
3	Tree: habit	upright
		spreading
		drooping
4	Bearing habit	spurs only
		mixed
		terminal
5	Shoot: colour on one year old, on sunny side	dark brown
		light brown
		medium brown
		reddish brown
6	Leaf blade: orientation in relation to shoot	upwards
		outwards
		downwards
7	Leaf blade: length (cm)	short (<4.0)
		medium ( 4.0-7.0)
		broad (>7.0)
8	Leaf blade: width (cm)	narrow (<2-4.0)
		medium(>4.0-6.0)
		broad(>6.0)
9	Leaf blade : ratio length /width	small (<0.5-1.0)
		medium(>1.0-2.0)
		large (>2.0-3.0)
		very large (>3.0)
10	Leaf blade: pubescence on lower side	less/ weak
		moderate
		high
11	Leaf blade: intensity of green colour	light green
		green
		dark green



12	Leaf blade: incision of margin (Upper half)	crenate
		bicrenate
		serrate type 1
		serrate type 2
		biserrate
13	Leaf blade: size of stipules	absent
		very small
		small/ narrow
		medium
		broad/large
14	Onset of flowering	early
		mid
		late
		free
		intermediate
15	Flower: arrangement of petals	overlapping
		below
		same level
16	Flower: position of stigmas relative to anthers	above
		white
		yellowish pink
17	Flower: predominant colour at balloon stage	light pink
		dark pink
		red
		purple
		weak
18	Fruit let: anthocyanin colouration	medium
		strong
		small (<60)
19	Fruit: weight (g)	medium (60-120)
		large (>120-240)
		extra-large (>240 )

20	Fruit: shape	conical
		cylindrical
		cylindrical waisted
		ellipsoid
		globose
		obloid
		ovoid
21	Fruit: size of eye basin (mm)	small (<1.5)
		medium (1.5-2.0)
		large(>2.0)
22	Fruit: firmness of flesh (psi)	soft (<25)
		medium (25-30)
		firm (>30)
23	Fruit: length of stalk (cm)	very short (<0.65)
		short (0.65-1.0)
		medium (>1.0-1.9)
		long (>1.9-2.25)
		very long (>2.25)
24	Fruit: depth of stalk cavity (cm)	shallow (<1)
		medium(1.0-2.0)
		deep (>2.0)
25	Fruit: prominence of lobes at calyx end	absent
		weak
		moderate
		strong
26	Fruit: bloom of skin	weak
		moderate
		strong
27	Fruit: greasiness of ski	absent or weak
		moderate
		strong
28	Fruit: over colour	very small
		small
		medium
		large



29	Fruit: pattern of over colour	only solid flush
		solid flush with weakly defined stripes
		solid flush with strongly defined stripes
		weakly defined flush with strongly defined stripes
		flushed and mottled
		flushed striped and mottled
30	Fruit: area of russet around Stalk attachment	small
		medium
		large
31	Fruit: area of russet on cheeks	absent
		small
		medium
		large
32	Fruit: area of russet around eye basin	absent
		small
		medium
		large
33	Fruit: number of lenticels	few
		medium
		many
34	Fruit: colour of flesh	whitish
		creamy
		pinkish
		greenish
		yellowish
35	Fruit maturity: days (DAFB)	very early (< 90)
		early (90-105)
		medium (105-130)
		late (130-170)
		very late >170