

An Approach to Fruit Identification using Digital Media

Introducing fruitID.com

Suffolk Traditional Orchards Group
Conference
21 February 2015

Peter Laws



Pips / seedlings are un-named. The DNA of the parents has been shuffled to give a new variety. Sometimes bud mutations (sports) arise.



Selected named varieties (cultivars) are propagated by budding / grafting

Identification enables correct care and use. It underpins conservation for genetic diversity and heritage reasons.

Recognition through expertise



fruit size, shape,
appearance,
skin texture , taste,
fragrance, features,
tree, use

**Variability is
everywhere!**



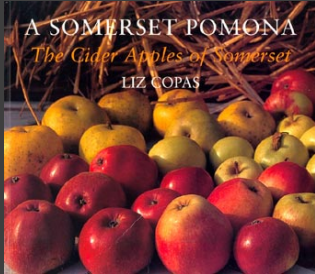
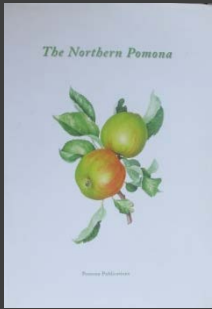
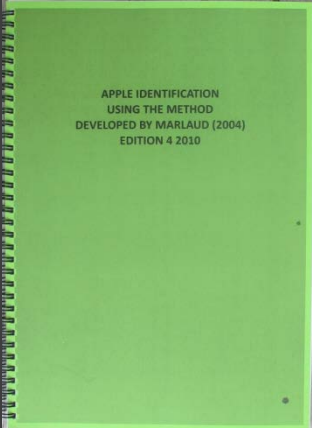
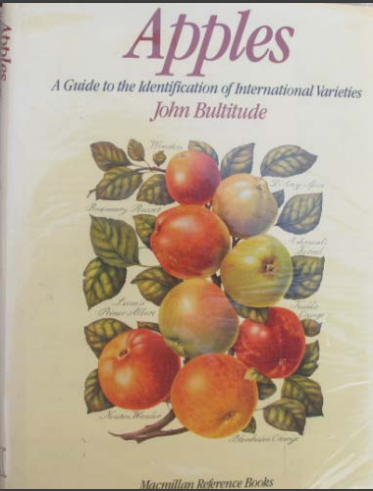
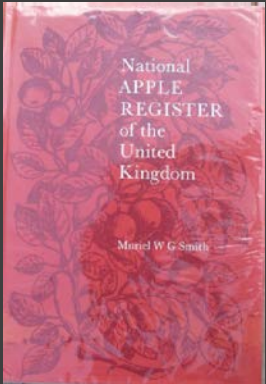
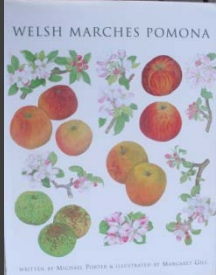
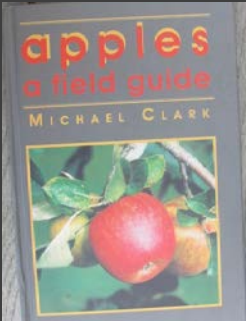
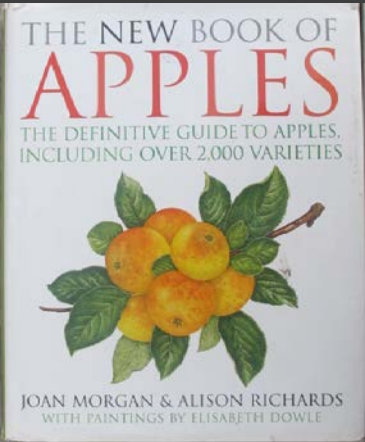
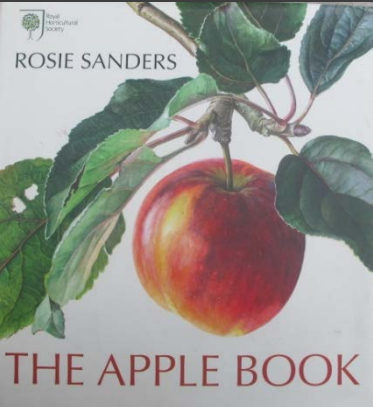
Scarcity of experts

- orchardists
- curators
- pomologists

We all need help if the sample is unfamiliar.

So how to ID the unfamiliar?

ID reference books



Resolved appearance to 8 groups: then season and shape



Group 1 - green, acid



Group 2 - green, sweet



Group 3 - striped, acid



Group 4 - striped, sweet



Group 5 - yellow



Group 6 - mainly red



Group 7 - striped, flushed,
with some russet



Group 8 - russet

6 primary and 4 secondary characters; plus grid of salient features

Arrangement of Applekey after Marlaud

Variety Name	Primary	Secondary	Tertiary Characters																							
			basin wall	stalk shape	skin flush	fruit size	basin shape	eye size	ribs	redness	skin texture	sepal position	stalk breadth	lenticel colour	late colour	lenticel prominence	cavity shape	flesh colour	carpel shape	carpel closure	calyx hollow shape	calyx hollow surface	stamen position	bloom		
Taunton Cross	135701	2357	SO	ST	AL	I	I	I	AB	AB	G	CR	I	O	Y	AL	I	CR	B	O	C	SO	LM	SO		
Merton Knave	135701	2358	AL	ST	AL	I	S	I	AB	AL	G	UR	I	W	YG	SO	S	T	N	C	C	SO	LM	SO		
Early Red Bird	135701	2358	AL	ST	AL	I	S	I	AB	SO	G	CR	I	W	CR	SO	D	T	N	C	C	SO	LM	AB		
Delbarestivale	135701	2358	SO	N	AL	I	I	L	AB	AB	G	C	I	O	Y	SO	I	CR	N	C	C	AL	UM	AB		
Cheddar Cross	135701	2367	AL	ST	SO	I	S	I	AB	AB	G	UR	I	R	Y	AB	I	CR	B	C	F	AL	I	AB		
Cheddar Cross	135701	2367	AL	ST	SO	I	S	I	AB	AB	G	UR	I	R	Y	AB	I	CR	B	C	F	AL	I	SO		
Cheddar Cross	135701	2367	AL	B	AL	I	S	I	AB	AB	G	UR	B	O	Y	SO	S	CR	B	C	F	SO	LM	AB		
Ellison's Orange	135701	2367	AL	N	AL	S	S	L	AB	AB	G	CR	I	O	YG	AB	I	T	B	C	F	SO	I	AB		
Ellison's Orange	135701	2367	AL	N	AL	S	S	L	AB	AB	G	CR	I	O	YG	AB	I	T	B	C	F	AB	I	AB		
Ellison's Orange	135701	2367	AL	N	AL	S	S	I	AB	AB	G	CR	I	O	YG	SO	I	CR	MX	MX	F	AB	I	AB		
Thorle Pippin	135701	2367	AB	ST	AL	I	S	L	AB	AB	G	CR	I	O	Y	AB	I	CR	B	C	F	AL	I	AB		
Laxton's Pioneer	135701	2367	SO	ST	AL	L	I	L	AB	SO	G	E	I	O	CR	SO	D	W	MX	MX	F	SO	I	AB		
Fletcher's Prolific	135701	2367	SO	B	AL	I	S	I	AB	AB	G	CR	B	O	Y	SO	S	CR	B	MX	F	AL	I	AB		
Sundown	135701	2367	AB	ST	AL	I	S	I	AB	AL	G	C	I	RU	Y	AL	I	CR	B	C	F	AL	I	AB		
Sandringham	135701	2367	AL	ST	AL	I	S	I	AB	AB	G	UR	I	BR	YG	SO	I	W	B	O	F	AB	I	AB		
Red Devil	135701	2367	AL	ST	AL	I	S	I	AB	SO	G	CR	I	GY	Y	SO	I	W	B	C	F	SO	I	AB		
Falstaff	135701	2367	AL	ST	AL	I	S	I	AB	AB	G	UR	I	MX	Y	SO	I	CR	B	C	F	SO	I	AB		
Lake's Kernel	135701	2367	AL	N	AL	I	S	I	AB	AB	G	CR	I	O	O	SO	D	CR	B	C	F	SO	UM	AB		
Crimson Beauty of Bath	135701	2368	SO	B	AL	I	S	L	AB	AL	G	UR	B	O	Y	AB	I	T	N	C	F	AL	I	SO		
Jonamac	135701	2457	SO	ST	AL	I	S	I	AB	AL	D	UR	I	W	CR	AL	I	T	B	MX	C	SO	LM	AL		
Laxton's Victory	135701	2458	AL	ST	AL	I	S	I	AB	AB	D	CR	I	O	Y	SO	I	CR	N	MX	C	SO	I	AB		
Charles Ross	135701	2467	AB	ST	AL	I	I	L	AB	AB	D	CR	B	O	Y	SO	I	CR	B	C	F	SO	I	AB		
Epicurean	135701	2467	SO	N	AL	I	S	L	AB	SO	D	CR	I	O	Y	SO	D	T	B	MX	F	SO	I	AB		
Saint Everard	135701	2467	AL	B	AL	I	S	L	AB	SO	D	CR	B	RU	Y	AL	S	T	MX	MX	F	AL	UM	AB		
Summered	135701	2467	SO	ST	AL	I	S	I	AB	AL	D	CR	I	MX	Y	SO	I	W	B	O	F	SO	I	AB		

Temperature
Moisture
Light

Carpel shape
Broad
Narrow

See Appendix 3 for
used in the table of
for ease of use during a

For top-fruit cultivars growing in Britain, we need:

- **Images** - with fine detail
- **Properties** – searchable characteristics - variability
- **Descriptive text** - everything we know - synonyms, heritage and cultivation

Content based on samples from reference trees, the literature and expertise of the members. Community based, moderated and free.

Designed to handle variability!

The screenshot shows a web browser window with the URL <http://www.fruitid.com/>. The page layout includes a vertical gallery of apple images on the left, a central content area with the fruitID logo and text, and a right-hand sidebar with navigation and search options.

fruit ID

In our efforts to conserve heritage varieties and orchards, we need to identify fruit cultivars accurately.

We now have useful coverage of the APPLE cultivars found growing in Britain, but it will take several years yet to make this comprehensive. We log our progress each month in the HELP pages.

The proposed ID structure for PEARS has been modelled and a project team is working on COBNUTS. Neither of these fruit types is ready for searching.

Guests see only completed published varieties (black titles), but you can SIGN UP, it is free, to ask to view the 809 apple varieties in scope so far or to join the team. Please study the Guidance Notes using the "more" link below.

[More >>](#)
[Contact Us >>](#)

Welcome Peter R Lavs | [Profile](#) | [Sign Out](#) [Help ?](#)

Varieties

Apple Pear

Search Apple

Community created catalogue for apple identification
Search 260 published varieties

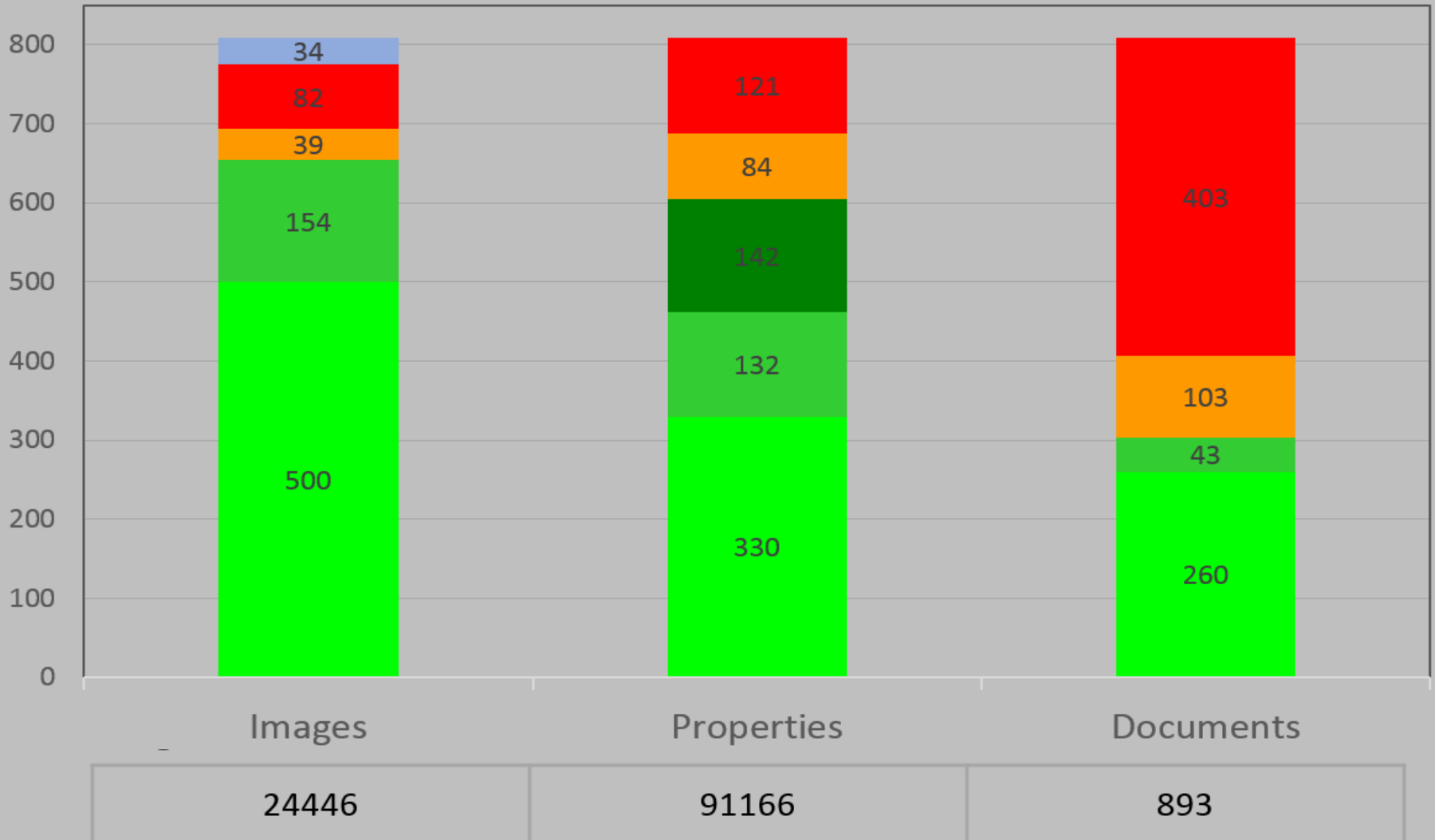
Quick search. Enter variety name.

[Identification](#) [Catalogue](#) [Forum](#)

Contribute your expertise by requesting to become a contributor

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Cultivar Coverage - Apples



Case study

An unfamiliar apple



fruit ID

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[Contact Us >>](#)

Varieties Apple Pear

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Quick search:

Identification ▾
 Catalogue
 Forum

[Contribute your expertise by requesting to become a contributor](#)



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[More >>](#)

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Varieties Apple Pear

Search Apple

Community created catalogue for apple identification
Search 260 published varieties

Quick search. Enter variety name.

- Identification
- Catalogue
- Forum

- Full Identification**
Apple identification with detailed guidance
- Quick Identification
For use by experienced apple identifiers
- Name Search
For one or more apple variety names



Please select one or more criteria to start your search

- Apple identification
- Occurrence
- Fruit and leaves
- Cultivation and blossom
- Origin and status
- Lists and awards
- References
- Project administration

Apple identification

Of course, not every apple can be identified as a named variety.

Any tree grown from a pip is a new variety and therefore initially unnamed. Even if named historically and propagated, it may not be in the literature. Also, formal records are often incomplete or confused.

Many varieties are known by several names, i.e. synonyms, and we provide a cross reference for these. Some varieties are too variable, or are too similar to other varieties, to allow definitive identification in the field. Identification accuracy will improve with experience, using a methodical approach and having good information. Using fruitID should assist your research.

Using **Full Identification**, the steps to identify an unknown variety are:

1. Click the headings in the left hand toolbar and choose characteristics observed for your sample. If unsure, try another criterion.
2. Use the criteria, from any section in any combination, having studied the definitions and visual guides. Adding criteria from different pages will narrow the search, whilst using multiple values on any page will widen the search. Note the results count in the header of the screen. Use as few criteria as you can – a search result even of 20 to 50 matches is fine.
3. Click “Get matches”. The results are shown as a palette of images, or you can opt for a list view of useful cultural data.
4. Open a Variety Page and study the images and multiple description pages. Magnify the DeepZoom image by clicking repeatedly. The variety page has navigation controls so you can step through your search results. Discard or keep the possibilities as you study the evidence to find, hopefully, an accurate match.
5. Treat this only as a probable identification unless you are certain.

Of course, fruitID may not yet contain the variety you seek. It will take us several years to cover even the common varieties. If you would like to become a Contributing Editor, or have a query about the project, click “Contact us” on the home page.



Please select one or more criteria to start your search

- ▶ Apple identification
- ▼ Occurrence
 - Frequency in the East of England
 - Tree situation
 - Age of tree
 - Commercial tree sales
- ▶ Fruit and leaves
- ▶ Cultivation and blossom
- ▶ Origin and status
- ▶ Lists and awards
- ▶ References
- ▶ Project administration

Occurrence

When we are shown an unfamiliar sample we often start by asking what is known about the tree. For example, where is it growing? If it is a hedgerow or roadside tree, we may follow up with questions to establish whether it is likely to be an unnamed seedling or whether there are several identical ones that form a pattern from a previous orchard planting. If it is an old tree, it is unlikely to be a modern cultivar.

If the tree has been purchased in the last few years and they have simply lost the label that is relevant information. The range of trees likely to be growing in a commercial orchard is much more limited than those available in old catalogues.

Whilst we may be excited by a rarity, we may also wish to search for our unfamiliar sample initially by abundant/frequent varieties before widening the search to include those normally only found in specialist collections. The illustration below is of the very old collection at Girton College, Cambridge, England.



Please select one or more criteria to start your search [Get Matches](#) [Clear](#)

- Apple identification
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 - Tree situation**
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Tree situation

This factor is a guide to the environment where a particular variety is most likely to be found growing.

Click to select the required value(s).

- Garden**
Deliberately planted apple tree, probably showing some sign of formative training.
- Orchard - commercial**
Varieties commonly used for large-scale fruit production where reliable yields, size and appearance and suitability for transportation and storage are essential. Trees were usually planted in rows, often in blocks of the same variety around a pollinator to increase yields. Also use this criterion for apples obtained from farm shops or supermarkets, or for heritage varieties that were "grown for the market". Sometimes the row patterns of a previous orchard can be discerned in later residential development and this criteria is applicable.
- Orchard - farm / farm house**
Old established farm houses where an amount of land around the house could be spared for an orchard may include interesting varieties from the catalogues of the time. Less often grown in strict rows since they might not be designed for access by orchard equipment. Often grown as half or full standards to permit grazing by poultry or sheep underneath.
- Farmland and woodland**
Apple trees in a countryside setting not planted as an orchard
- Landscaping**
Amenity planting of apple trees planted e.g. in landscaping. Crab varieties are often used for their decorative blossom and fruit.
- Botanical collection**
Tree is part of a botanical or heritage collection. This includes historical garden restorations; community orchards and collections of local varieties; or an enthusiast's grafted collection.
- Wayside**
Trees that occur in no set planted pattern on the roadside, railway embankments and footpaths and not alongside other identical varieties. These trees will not show signs of formative pruning or evidence of graft union just above ground level. This probably indicates that the apple tree has arisen from seed dispersal, e.g. discarded apple cores, and so the seedling can be assumed not to be of a named variety and identification is consequently meaningless. If the variety has definite merit it may still be worth conserving and the tree preserved as the mother tree of the new variety. However merit in itself of a single tree does not constitute a "Local Variety" That situation arises when a variety has been propagated in a locality and so it is already known there by a locally accepted name. (See also Accession Status)

You have selected 1 criterion with 179 matches [Get Matches](#) [Clear](#)

- ▶ Apple identification
- ▼ Occurrence (1)
 - Frequency in the East of England
 - Tree situation (1)**
 - Age of tree
 - Commercial tree sales
- ▶ Fruit and leaves
- ▶ Cultivation and blossom
- ▶ Origin and status
- ▶ Lists and awards
- ▶ References
- ▶ Project administration

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You have selected 1 criterion with 179 matches [Get Matches](#) [Clear](#)

- Apple identification
- Occurrence (1)
- Fruit and leaves**
 - Appearance - Bultitude group**
 - Season of use
 - Fruit shape
 - Fruit diameter
 - 1 - Sweetness
 - 2 - Usable when picked
 - 3 - Stripes
 - 4 - Plan symmetry
 - 5 - Skin russet
 - 6 - Eye aperture
 - 7 - Prominent ribs
 - 8 - Greasiness
 - 9 - Calyx tube shape
 - 10 - Carpel breadth
 - Fruit phase
 - External - skin texture
 - External - bloom
 - External - ground colour
 - External - relative area of over colour
 - External - hue of over colour
 - External - skin pattern - flush
 - External - skin pattern - stripes
 - External - skin pattern - mottling
 - External - lenticels
 - External - Feature List
 - Basin - irregularities
 - Basin - sepal arrangement
 - Basin - Feature List
 - Cavity - markings
 - Cavity - stalk length



Fruit and leaves

In this section, we use criteria to help identify a variety from its fruit and leaves.

- We look first at the general appearance using the groupings by John Bultitude, the season of use, shape and size.
- The next 10 criteria follow René Marlaud's elegant method (2005) as extended by Simon Clark and Quentin Cleal (3rd edition 2009), with some minor rewording.
- We then consider external features with the basin and cavity separately, then internal features and finally leaf margins. Several criteria follow a guide (2006) by The International Union for the Protection of New Varieties of Plants, (UPOV).

Use as few criteria as necessary to give a manageable number of matches. If you unsure how to answer, try another criterion. You may mix criteria from different sections.

The criteria are NOT designed to identify a variety uniquely, they just give a shortlist. You have to study the text and pictures of probable varieties to reach your verdict.

If your sample has notable features, try these first. Otherwise, our criteria sequence is a good approach.

We explain botanical terms in the "Learn More" section, where you will also find articles on preparing samples and interpreting the images.



You have selected 1 criterion with 179 matches [Get Matches](#) [Clear](#)

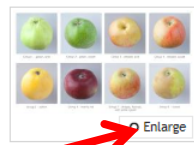
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 - External - skin texture
 - External - bloom
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 - External - hue of over colour
 - External - skin pattern - flush
 - External - skin pattern - stripes
 - External - skin pattern - mottling
 - External - lenticels
 - External - Feature List
 - Basin - irregularities
 - Basin - sepal arrangement
 - Basin - Feature List
 - Cavity - markings
 - Cavity - stalk length

Appearance - Bultitude group

In 1983 John Bultitude grouped apple cultivars by the appearance of the mature fruit when ready to be used.

Caution: some varieties change colour as they ripen, or have variable stripes, and so belong in more than one group. Fruit must be fully developed and not be under-ripe or poorly coloured by being shaded. You need enough samples to be representative. If you are not certain that your samples meet these requirements, move to another criterion.

Click the icon on the right for a visual guide, but the definition is contained in the text below. The example varieties given are only to assist understanding and are not a shortlist! Scroll down if necessary to see all the 8 groups and select one or more. Be aware that selecting more than one value will widen the search.



Enlarge

- Group 1**
Green with very little russet, sometimes with a brownish orange flush, smooth-skinned acidic culinary varieties. Examples include Lord Derby and French Crab CAUTION: You need to be sure that you do not have an under-ripe sample. Many cultivars in Group 5 are green before they are ripe and so will be missed in your search if assigned Group 1. If you are uncertain you may click Groups 1 and 5 or alternatively just ignore this criterion.
- Group 2**
Predominantly green, sometimes with a brownish orange flush, smooth-skinned, sweet dessert apples such as Granny Smith and Sturmer Pippin
- Group 3**
Striped, sometimes flushed, smooth-skinned, acidic culinary varieties. Examples include Lane's Prince Albert and Newton Wonder.
- Group 4**
Striped, sometimes flushed, smooth-skinned, primarily dessert, but also some dual purpose varieties. Examples include James Grieve, Gravenstein and Cox's Pomona.
- Group 5**
Predominantly yellow, usually smooth-skinned, both sweet / dessert and acidic / culinary varieties. Examples include Golden Delicious, Golden Noble and Antonovka.
- Group 6**
Predominantly red-flushed, smooth-skinned varieties. Some may also have stripes, but if they are predominantly red flushed, they are placed in this group. These are generally sweet dessert varieties. Examples include Worcester Pearmain, McIntosh and Delicious, but also a few culinary varieties such as Red Victoria and Norfolk Beefing.
- Group 7**
Some russetting, with skin colouration (flushed and usually striped), and are usually sweet, dessert varieties. They are often referred to as "Reinettes". Examples include Cox's Orange Pippin, King of the Pippins and Golden Reinette. If your sample is fully developed but has no flush or stripes but does have some russetting, consider the definition in Group 5, which does not mention textures.
- Group 8**
Completely russetted, or with significant areas of solid russet, and are usually sweet, dessert varieties. Some can also have stripes or flush, but if some samples are significantly russetted, the variety is placed in this group. Examples include Egremont Russet, Ashmead's Kernel and Reinette du Canada.

Quick Identification

Exit Search

- Criteria
- Apple ide
- Occurre
- Fruit and
- Appear
- Season
- Fruit sh
- Fruit di
- 1 - Swe
- 2 - Usab
- 3 - Strip
- 4 - Plan
- 5 - Skin
- 6 - Eye
- 7 - Pron
- 8 - Grea
- 9 - Caly
- 10 - Car
- Fruit ph
- Externa
- Externa
- Externa
- Externa
- Externa
- Externa
- Externa
- Externa
- Basin -
- Basin -
- Basin -
- Cavity -
- Cavity -

Image Viewer - "Appearance - Bultitude group"



Group 1 - green, acid



Group 2 - green, sweet



Group 3 - striped, acid



Group 4 - striped, sweet



Group 5 - yellow



Group 6 - mainly red



Group 7 - striped, flushed, with some russet



Group 8 - russet

Close



You have selected 2 criteria with 46 matches [Get Matches](#) [Clear](#)

- Apple identification
- Occurrence (1)
- Fruit and leaves (1)
- Appearance - Bultitude group (1)**
- Season of use
- Fruit shape
- Fruit diameter
- 1 - Sweetness
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Click the icon on the right for a visual guide, but the definition is contained in the text below. The example varieties given are only to assist understanding and are not a shortlist! Scroll down if necessary to see all the 8 groups and select one or more. Be aware that selecting more than one value will widen the search.



- Group 1**
Green with very little russet, sometimes with a brownish orange flush, smooth-skinned acidic culinary varieties. Examples include Lord Derby and French Crab CAUTION: You need to be sure that you do not have an under-ripe sample. Many cultivars in Group 5 are green before they are ripe and so will be missed in your search if assigned Group 1. If you are uncertain you may tick Groups 1 and 5 or alternatively just ignore this criterion.
- Group 2**
Predominantly green, sometimes with a brownish orange flush, smooth-skinned, sweet dessert apples such as Granny Smith and Sturmer Pippin
- Group 3**
Striped, sometimes flushed, smooth-skinned, acidic culinary varieties. Examples include Lane's Prince Albert and Newton Wonder.
- Group 4**
Striped, sometimes flushed, smooth-skinned, primarily dessert, but also some dual purpose varieties. Examples include James Grieve, Gravenstein and Cox's Pomona.
- Group 5**
Predominantly yellow, usually smooth-skinned, both sweet / dessert and acidic / culinary varieties. Examples include Golden Delicious, Golden Noble and Antonovka.
- Group 6**
Predominantly red-flushed, smooth-skinned varieties. Some may also have stripes, but if they are predominantly red flushed, they are placed in this group. These are generally sweet dessert varieties. Examples include Worcester Pearmain, McIntosh and Delicious, but also a few culinary varieties such as Red Victoria and Norfolk Beefing.
- Group 7**
Some russetting, with skin colouration (flushed and usually striped), and are usually sweet, dessert varieties. They are often referred to as "Reinettes". Examples include Cox's Orange Pippin, King of the Pippins and Golden Reinette. If your sample is fully developed but has no flush or stripes but does have some russetting, consider the definition in Group 5, which does not mention textures.
- Group 8**
Completely russeted, or with significant areas of solid russet, and are usually sweet, dessert varieties. Some can also have stripes or flush, but if some samples are significantly russeted, the variety is placed in this group. Examples include Egremont Russet, Ashmead's Kernel and Reinette du Canada.

You have selected 2 criteria with 46 matches [Get Matches](#) [Clear](#)

- Apple identification
- Occurrence (1)
- Fruit and leaves (1)
 - Appearance - Bultitude group (1)
 - Season of use
 - Fruit shape
 - Fruit diameter
 - 1 - Sweetness
 - 2 - Usable when picked
 - 3 - Stripes
 - 4 - Plan symmetry
 - 5 - Skin russet
 - 6 - Eye aperture
 - 7 - Prominent ribs
 - 8 - Greasiness
 - 9 - Calyx tube shape
 - 10 - Carpel breadth
 - Fruit phase
 - External - skin texture
 - External - bloom
 - External - ground colour
 - External - relative area of over colour
 - External - hue of over colour
 - External - skin pattern - flush
 - External - skin pattern - stripes
 - External - skin pattern - mottling
 - External - lenticels
 - External - Feature List
 - Basin - irregularities
 - Basin - sepal arrangement
 - Basin - Feature List
 - Cavity - markings
 - Cavity - stalk length

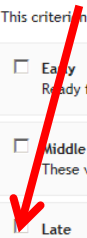
Season of use

This term is so entrenched in horticultural parlance that we have included it here. Ripening is of course a continuum and actual dates vary from season to season.

The usage dates refer to natural storage under amateur conditions, not for gas-controlled, cold-storage. The U.K date equivalents are for Kent and are based on the National Fruit Collection records as reported by Joan Morgan in the New Book of Apples.

This criterion is slightly different from maturation or fruit phase, so choose the one most appropriate for your purpose.

- Early
Ready for use at the beginning of the cropping season. U.K. calendar would be late July - early September
- Middle
These varieties can be used in late summer to autumn. U.K. calendar would be September - November
- Late
Can be kept later in natural storage. U.K. calendar would be December onwards.



You have selected 3 criteria with 34 matches [Get Matches](#) [Clear](#)

- ▶ Apple identification ?
- ▶ Occurrence (0) ?
- ▼ Fruit and leaves (2) ?
 - Appearance - Bultitude group (1)
 - Season of use (1)
 - Fruit shape
 - Fruit diameter
 - 1 - Sweetness
 - 2 - Usable when picked
 - 3 - Stripes
 - 4 - Plan symmetry
 - 5 - Skin russet
 - 6 - Eye aperture
 - 7 - Prominent ribs
 - 8 - Greasiness
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 - External - skin texture
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- Late**
Can be kept later in natural storage. U.K. calendar would be December onwards.

You have selected 4 criteria with 11 matches [Get Matches](#) [Clear](#)

- Apple identification
- Occurrence (1)
- Fruit and leaves (3)
 - Appearance - Bultitude group (1)
 - Season of use (1)
 - Fruit shape (1)
- Fruit diameter
- 1 - Sweetness
- 2 - Usable when picked
- 3 - Stripes
- 4 - Plan symmetry
- 5 - Skin russet
- 6 - Eye aperture
- 7 - Prominent ribs
- 8 - Greasiness
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- External - lenticels
- External - Feature List
- Basin - irregularities
- Basin - sepal arrangement
- Basin - Feature List
- Cavity - markings
- Cavity - stalk length

Fruit shape

What is the shape of the apple?

We have adopted the 9 values used by Bultitude and also by Morgan. (These appear compatible with the 8 values used by Sanders but add short-round-conical). Click the icon on the right for a visual guide.

This factor can be quite variable even for fruit from the same tree. However, some shapes are unusual and so are useful for identification. The conical Adams's Pearmain or the flat-round Devonshire Quarrenden spring to mind. The round and round conical shapes are so common as to provide little differentiation for search purposes.

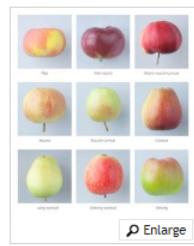
When referring to the classical reference books, you are generally expected to exclude king fruit, i.e. those arising from the centre blossom in a flower cluster. King fruit in some varieties are taller and more conical and can often, but not always, be recognised by a swollen stalk or distorted cavity.










However in fruitID we include the king fruit in our images and in coding of the shape factor. This is because identifiers are often presented with the king fruit to identify as the "biggest and best" from the tree. Some varieties set many king fruit (e.g. Newton Wonder). If adverse weather conditions affect the pollination of later flowers, then fruit from the earlier centre blossom may predominate.

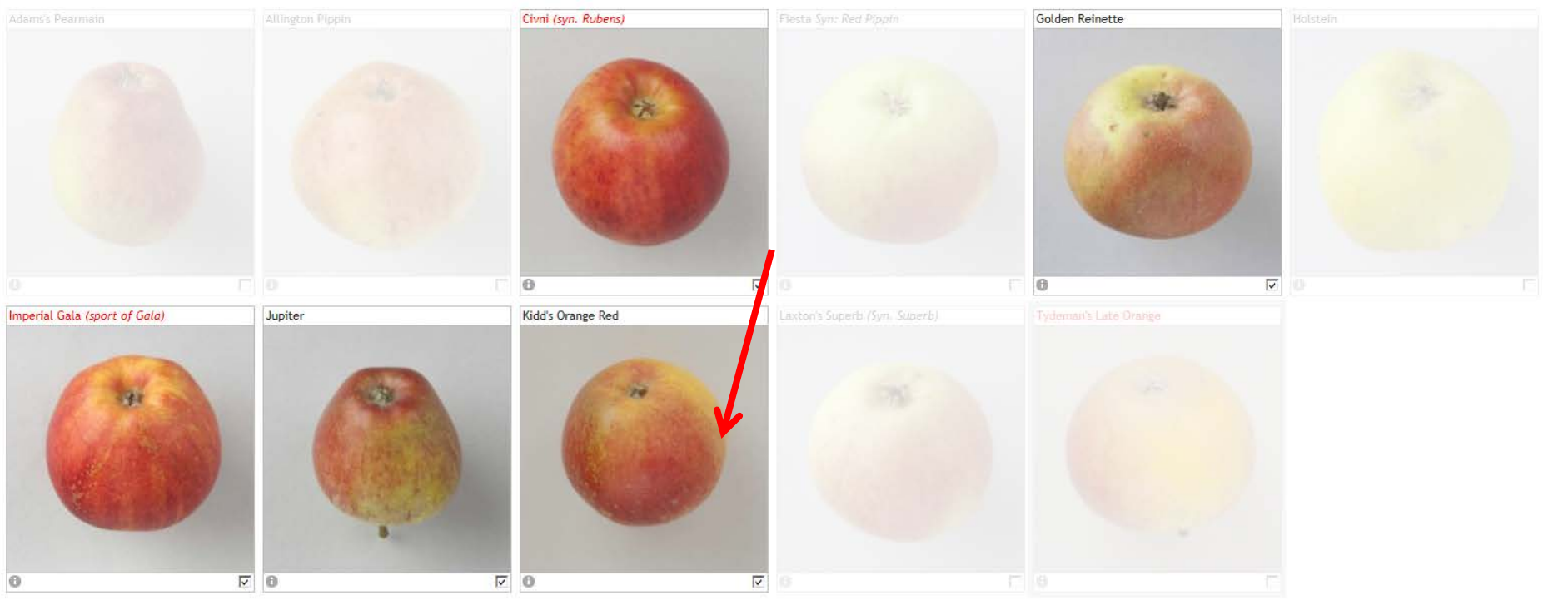
Select one or more values from the list.

Note also the Inverted Cavity value under "Cavity - Feature List" and the Waisted value under "External - Feature List".

- Flat
- Flat-round
- Short-round-conical
- Round
- Round-conical
- Conical
- Long-conical
- Oblong-conical
- Oblong



<p>Adams's Pearmain</p>  <p><input type="checkbox"/></p>	<p>Allington Pippin</p>  <p><input checked="" type="checkbox"/></p>	<p><i>Civni (syn. Rubens)</i></p>  <p><input checked="" type="checkbox"/></p>	<p>Fiesta Syn: Red Pippin</p>  <p><input type="checkbox"/></p>	<p>Golden Reinette</p>  <p><input checked="" type="checkbox"/></p>	<p>Holstein</p>  <p><input checked="" type="checkbox"/></p>
<p><i>Imperial Gala (sport of Gala)</i></p>  <p><input checked="" type="checkbox"/></p>	<p>Jupiter</p>  <p><input checked="" type="checkbox"/></p>	<p>Kidd's Orange Red</p>  <p><input checked="" type="checkbox"/></p>	<p>Laxton's Superb (Syn. Superb)</p>  <p><input checked="" type="checkbox"/></p>	<p><i>Tydeman's Late Orange</i></p>  <p><input checked="" type="checkbox"/></p>	



Images (51)

Select Image DeepZoom ◀ ▶



Documents (3) Properties (154) Synonyms (3) Comments (2)

Select Document Synopsis ◀ ▶

Kidd's Orange Red

Use	Dessert	Pick (Kent)	Mid-October
Occurrence	Orchards and garden	Store (U.K.)	November to January
Arose	New Zealand	Builtitude Group	7
Date	1924	Flowering	F 12



This late desert apple was raised in 1924 by James Hatton Kidd in Greytown, Wairarapa, North Island, New Zealand from Cox's Orange Pippin x Delicious. It was introduced to the U K about 1932 and received the Royal Horticultural Society Award of Merit in 1973. James Kidd was a fruit farmer and amateur breeder who aimed to combine the quality of the best English varieties with the colour of American apples and with this apple he succeeded. It is grown commercially in New Zealand and to a small extent in England. It gained popularity as a long storing Cox type but in some districts it can be prone to excessive russetting. There is also a more highly coloured sport called Captain Kidd.

It is a medium apple, conical in shape with a deep pinky crimson flush and some darker purplish stripes over pale yellow/gold skin. Lenticels show as fine russet dots and there are patches of russet especially at the base. It is slightly ribbed and five crowned. The flesh is a deep cream colour, fine-textured, sweet and juicy with a slight vinous aroma.

The trees are moderately vigorous, upright spreading, produce spurs freely and have very attractive blossom. The cropping is good but the fruits can be small unless they are thinned. They are also prone to canker (Morgan) and are susceptible to damage from certain sprays (Sanders). Because of its origin it is only suitable for growing in the warmer counties of England.

Comparison notes

Lord Hindlip, with its generally dull appearance, has a resemblance to less coloured samples Kidd's Orange Red. Also William Crump, Laxton's Superb and Tydeman's Late Orange could cause confusion so these notes highlight the differences:

Compared with **Lord Hindlip**, Kidd's Orange Red is brighter; has more bloom, which can give it faintly grey appearance; tends to be more conical, and sometimes slightly waisted; has a fairly stout stalk, which is often fleshy; is more prone to scab; tends more to towards spur bearing; seems quite common. Lord Hindlip is rarer and is often taller, narrower and more oblong-conical in shape.

Kidd's Orange Red may also be confused with William Crump.

Under-ripe samples of Kidd's Orange Red may look similar to Laxton's Superb or Tydeman's Late Orange. However, Kidd's is less regular and more conical than either of these cultivars.

Tasting notes (© Joan Morgan)

Rich balance of sugar, acidity and strongly aromatic; mellows to intensely flowery or rose petal quality, some claim it tastes of

Adams's Pearmain Allington Pippin **Civni (syn. Rubens)** Fiesta Syn. Red Pippin Golden Reinette Hoistein Imperial Gala (sport of C) Jupiter **Kidd's Orange Red** Laxton's Superb (Syn. S Tydeman's Late Orange

Select Image DeepZoom



Kidd's Orange Red

External Characteristics

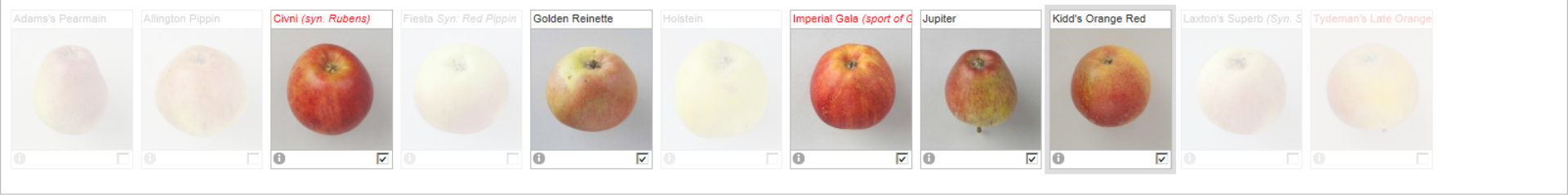
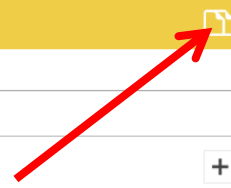
Size	Medium
Shape	Round conical to conical. Irregular, often ribbed and five-crowned, may be slightly waisted very near the apex.
Skin	Ground colour at picking time: yellow-green. Overcolour: orange-red to purple-red: flushed and weakly striped, sometimes mottled. Leaf shadows may be apparent. Under-ripe samples often show an extensive covering of scarf skin, giving a rather "milky" appearance. Skin Texture: dry or dry waxy, usually with some russet. Lenticels: visible, more conspicuous against flushed areas.
Eye and basin	Eye: often closed, but may be partially open. Sepals: erect-convergent or connivent. Downy. Basin: ribbed, occasionally beaded and/or creased. May be russeted.
Stalk and cavity	Stalk: fairly stout, often fleshy, may have a swelling at top and bottom. Usually protruding beyond base. Cavity: finely russeted. Sometimes with concentric rings.
Leaves	Leaf margins on first-year growth: serrate type 1 or crenate. Downy underside. Stipules sometimes prominent.

Internal Characteristics

Flesh	Colour: creamy white. Sweet, juicy, crisp
Tube & stamens	Tube shape: cone or funnel. Position of stamens: median. Colour of core line: greenish-yellow, inconspicuous. Position of core line: basal to median.
Core	Axile. Median
Carpels	Carpels (transverse section): broad or narrow, partially or fully open. Carpels (longitudinal section): round or ovate.
Seeds	Shape: acute or acuminate.

Cultural Characteristics

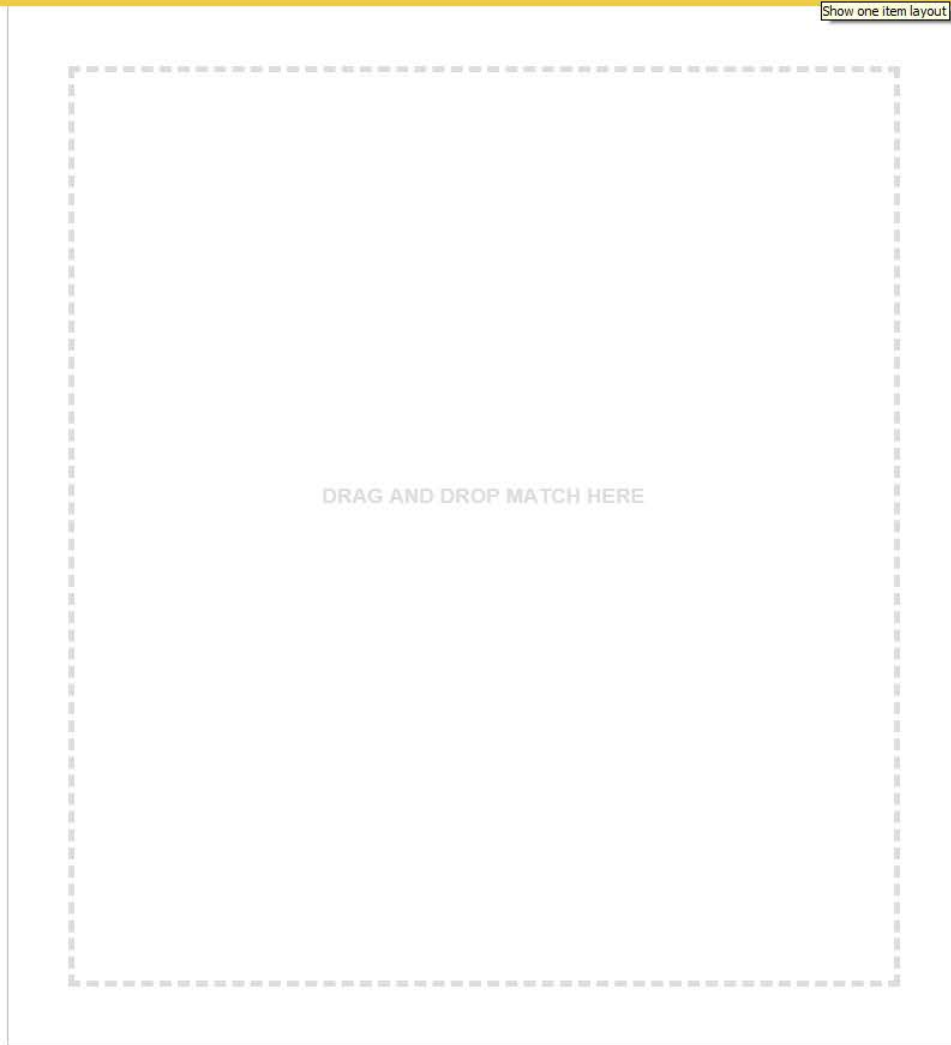
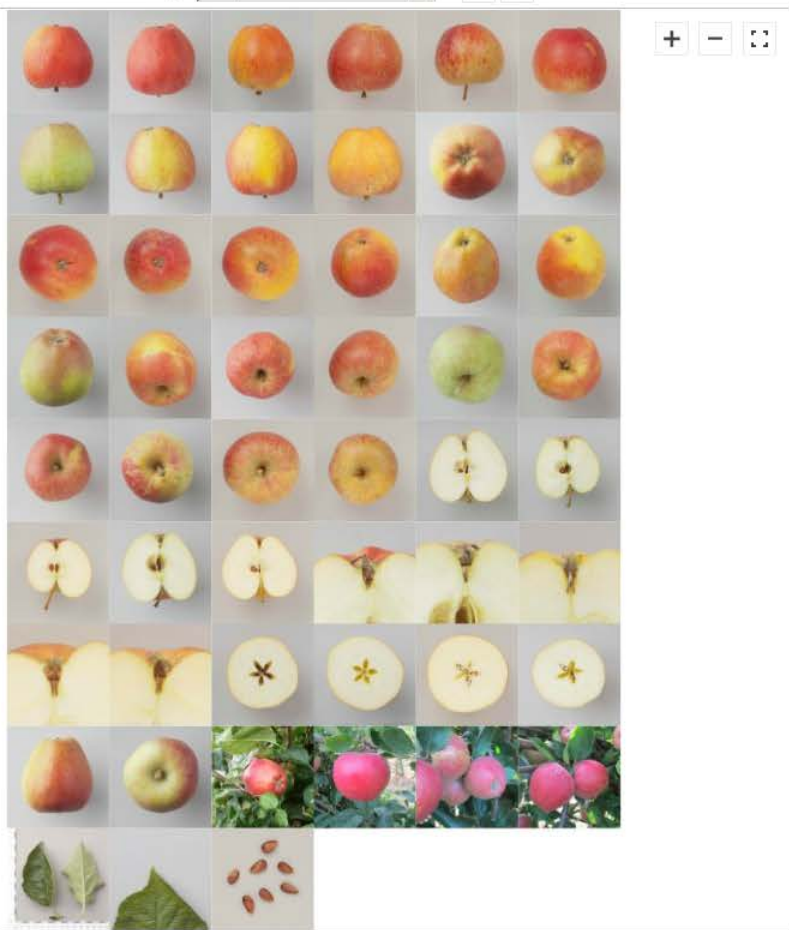
Use	Use: Dessert. Pick: Mid October. Season: November to January
Flowering	F 12



Kidd's Orange Red

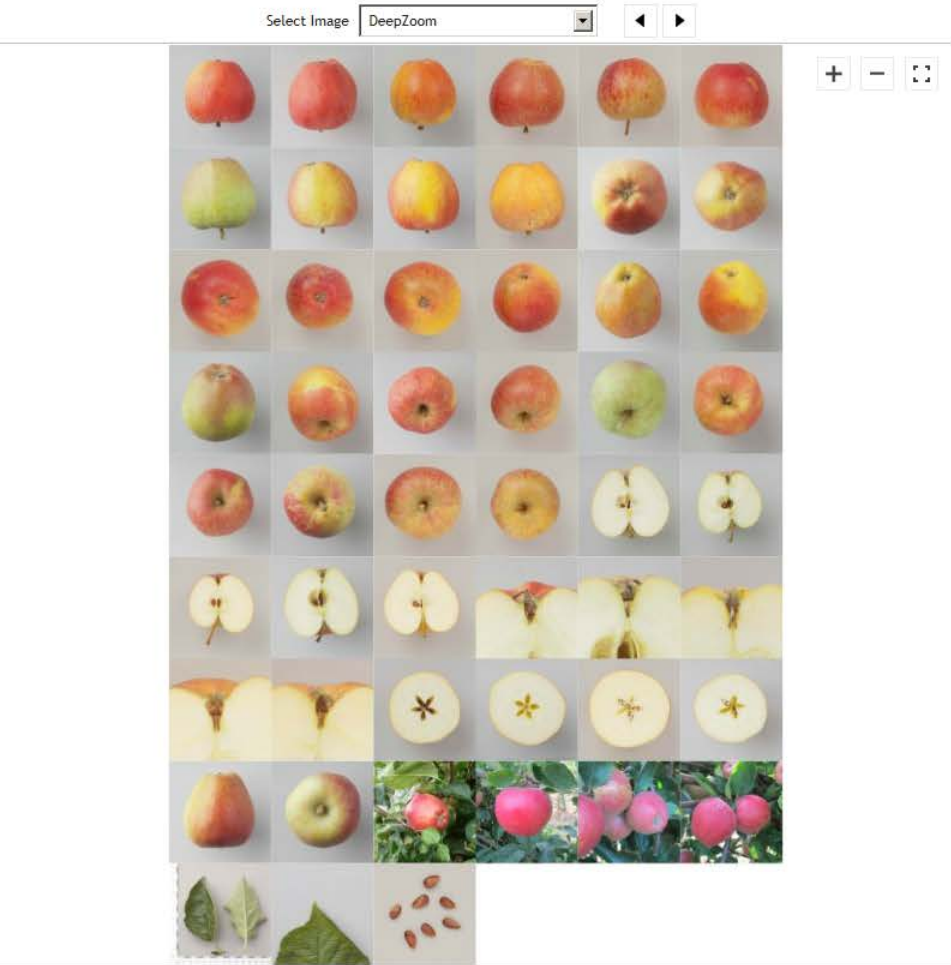
Images (51) Documents (3) Properties (154) Synonyms (3) Comments (2)

Select Image DeepZoom



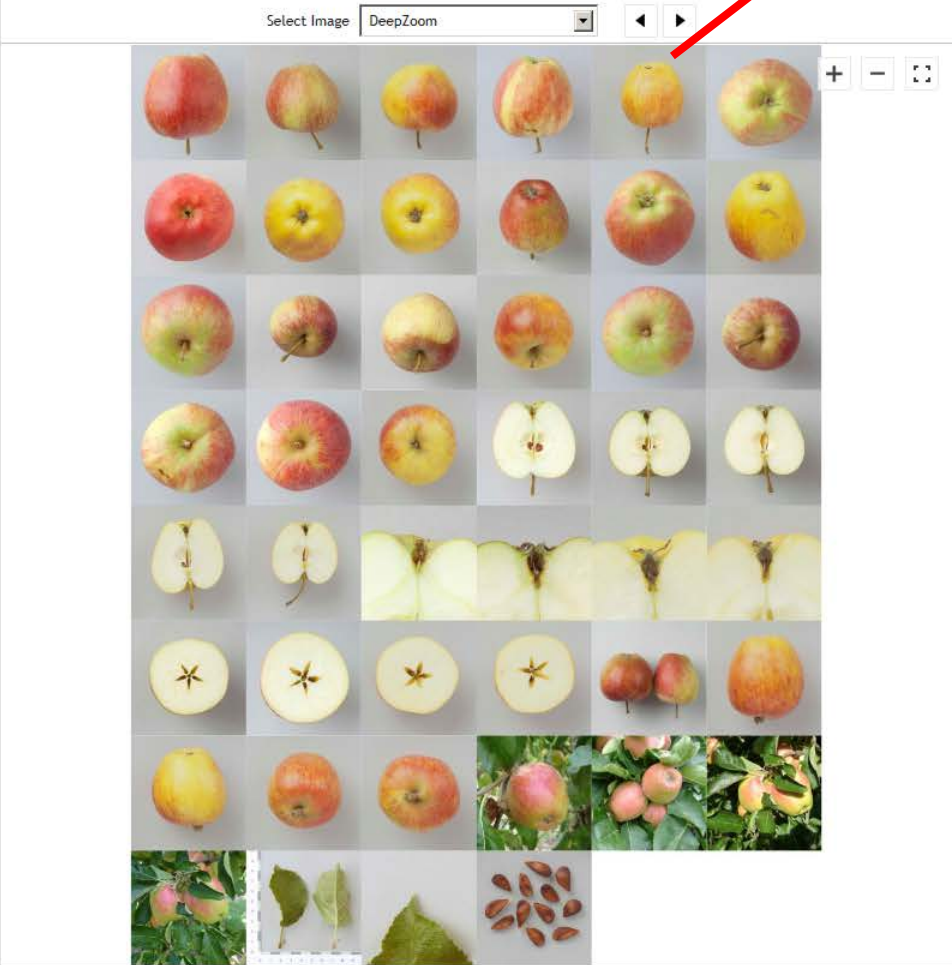
Kidd's Orange Red

Images (51) Documents (3) Properties (154) Synonyms (3) Comments (2)



Jupiter

Images (46) Documents (3) Properties (145) Synonyms (0) Comments (0)



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Occurrence	Orchards and garden	Store (U.K.)	November to January
Arose	New Zealand	Bultitude Group	7
Date	1924	Flowering	F 12

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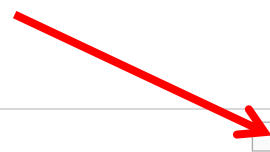
Rich balance of sugar, acidity and strongly aromatic; mellows to intensely flowery or rose petal quality, some claim it tastes of Parma violets. Needs plenty of autumn sunshine to build up flavours and variety for southern counties of England only.

Sample provenance

The samples shown are from National Fruit Collection Brogdale, Row 51, Tree 27 and from Narborough Hall, Norfolk.

Image comments

Images 1, 2 and 4 show the typical red hue found on well-coloured samples, with a flush that is more conspicuous than the stripes. On the fruit on branch images, bloom is very apparent (48). There can be widespread russet peeling around the lenticels (4), occasional netting (5) or small solid russet patches where abrasion has occurred (6). The ground colour is pale green and





fruit ID

In our efforts to conserve heritage varieties and orchards, we need to identify fruit cultivars accurately.

We now have useful coverage of the APPLE cultivars found growing in Britain, but it will take several years yet to make this comprehensive. We log our progress each month in the HELP pages.

The proposed ID structure for PEARS has been modelled and a project team is working on COBNUTS. Neither of these fruit types is ready for searching.

Guests see only completed published varieties (black titles), but you can SIGN UP, it is free, to ask to view the 809 apple varieties in scope so far or to join the team. Please study the Guidance Notes using the "more" link below.

[More >>](#)

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Varieties Apple Pear

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Community created catalogue for apple identification
Search 260 published varieties

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- Catalogue
- Forum

[Contribute your expertise by requesting to become a contributor](#)



Documents (3) Properties (154) Synonyms (3) Comments (2)

Select Document

References

Export

Michael Hennerty	The Heritage Apples of Ireland	2014	No ref
Liz Copas	Cider Apples – The New Pomona	2013	No ref
Andrew Mikolajski	The Illustrated World Encyclopedia of Apples	2012	98
East Malling Research for Defra	Fingerprinting the National Apple and Pear Collections Project Code GC0140 - Final Report	2010	No ref
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Joan Morgan & Alison Richards	The New Book of Apples	2002	231
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John Bultitude	Apples - A Guide to the Identification of International Varieties	1983	212
Muriel Smith	National Apple Register of the United Kingdom	1971	287
H V Taylor	Apples of England	1948 3 rd Edition (Rev)	No ref

Criteria 9 Matches

Refine Open Viewer

Variety Name	Use	Origin	First record	F Day	Poll.	Pick (Kent)	Store (U.K.)	Flavour	Cropping	Notes
→ Adams's Pearmain	Dual purpose	poss. Norfolk or Herefordshire	1826	F 9	Dipl.	e/m Oct	Nov-Mar	Rich nutty	Good	<input checked="" type="checkbox"/>
→ Barnack Beauty	Dessert	Lincs.	c 1840	F 14	Dipl.	e/m Oct	Dec/Jan	Strong brisk, slightly rich/aromatic	Heavy	<input checked="" type="checkbox"/>
→ Baxter's Pearmain (NFC Accession 1948 105)	Dessert	Norfolk	1821	F 15	Dipl.	m-Oct	Nov-Jan/Feb	Acid, fair	Heavy	<input checked="" type="checkbox"/>
→ Dutch Mignonne	Dual purpose	prob Netherlands	1771 in England	F 9	Dipl.	e-Oct	Nov-Mar	Brisk, plain. Cooks to stiff purée, light sweet taste	Moderate	<input checked="" type="checkbox"/>
→ Green Harvey	Dual purpose	U.K. Wisbech?	1813	F 14	Dipl.	l-Oct	To Feb	Moderately rich	Moderate to good	<input checked="" type="checkbox"/>
→ Hubbard's Pearmain	Dessert	Norfolk U.K.	circa 1820	F 10	Dipl.	e/m Oct	Nov-Feb	Sweet, rich, nutty	Good	<input checked="" type="checkbox"/>
→ Lord Burghley	Dessert	Cambs. (boundary)	c 1834	F 16	Dipl.	m-Oct	Jan/Apr	Brisk, aromatic quality, plenty of sugar, juicy firm flesh	Good	<input checked="" type="checkbox"/>
→ New Rock Pippin	Dessert	Cambridgeshire UK	1821	F 11	Dipl.	m-Oct	Jan/May	rich sweet-sharp	unrecorded	<input checked="" type="checkbox"/>
→ Sandringham	Dual purpose	Norfolk UK	1883	F 19	Dipl.	e-Oct	Nov/Feb	sub-acid	unrecorded	<input checked="" type="checkbox"/>

Searched for :
 Dessert Varieties from Suffolk, Norfolk, Cambs which are Victorian or older
 and are diploid and free spurring

fruitID is free to use

Malvern Conference
14th November 2014

Peter Laws
Bob Lever