



US00PP08720P

# United States Patent [19] Hill

[11] Patent Number: Plant 8,720  
[45] Date of Patent: May 10, 1994

[54] APPLE TREE NAMED APPLEWAITES

[76] Inventor: Richard Hill, St. Andrew's Road,  
Havelock North, New Zealand

[21] Appl. No.: 936,821

[22] Filed: Aug. 28, 1992

[51] Int. Cl.<sup>5</sup> ..... A01H 5/00  
[52] U.S. Cl. .... Plt./34.1  
[58] Field of Search ..... Plt. 34.1

[56] References Cited  
PUBLICATIONS

Application for Plant Selectors' Rights and Protective  
Direction, Technical Questionnaire.  
Objective Description of Variety Grant No. 610, Aug.  
28, 1991.

Primary Examiner—James R. Feyrer  
Assistant Examiner—E. F. McElwain  
Attorney, Agent, or Firm—Quarles & Brady

[57] ABSTRACT

A new and distinct variety of apple tree designated  
Applewaites is a mutation of the Gala Variety and is  
characterized by an overall strong dark red colour.

1 Drawing Sheet

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### SUMMARY OF THE INVENTION

The present invention relates to a new and distinct  
apple variety. The new cultivar is designated 'Ap-  
plewaites' and is a mutation of the Gala variety Kidds 5  
D8 (U.S. Plant Pat. No. 3,637).

After the variety was discovered in 1983 by the appli-  
cant in the Asparagus Limited Orchard, Hastings, New  
Zealand, it was asexually produced in 1984 at Limnos  
Investments property in Hastings, New Zealand by 10  
budding on to rootstock of the MM 106 variety. The  
fruit was first observed on the reproduced plants in 1986  
at Asparagus Limited Orchard. Asexual propagation by  
budding shows that the unique combination of charac-  
teristics and distinctive colour come true to form and 15  
are established and transmitted through succeeding  
propagations.

### BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying photograph shows typical speci-  
mens of the fruit of the new variety as depicted in col-  
ours as nearly true as is reasonably possible to make the  
same in a colour illustration of this character.

FIG. 1: shows both sides of the fruit, the overcolour  
and the background colour. 25

### DETAILED DESCRIPTION OF THE PLANT

The distinctive characteristics of this new apple culti-  
var described below were observed in Hastings. The  
trees were three to six years old.

Applewaites is similar to Fulford (U.S. Plant Pat. No.  
7,598) but has a more even red colouring deeper into the  
tree than Fulford. Colour development for Applewaites  
through the tree is superior to that achieved by Fulford.  
Applewaites has a strong bright red colouring over 35  
70-90% of the fruit surface. In comparison to Fulford,  
Applewaites has a birghter more developed red colour  
over a greater proportion of the apple than Fulford.  
The harvest date for applewaites is on average, at the  
same location and management, earlier than Fulford.  
The open harvest dates for Applewaites ranged from  
February 5 to February 17 for the years 1986 through  
1993. In comparison, the range of opening harvest dates  
over the same period for Fulford were 2-3 days later  
than those above. Under the same location and manage-

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ment, Applewaites is a weaker tree which sets a greater  
proportion of flowers than the Fulford variety. Ap-  
plewaites is correspondingly more difficult than Ful-  
ford to thin with the standard accepted rates of chemi-  
cal thinners. Fruit size for Applewaites is on average  
smaller as a result of the lower tree vigour and naturally  
higher fruit set than for Fulford. (Both Galaxy (U.S.  
Plant Pat. No. 6,955) and Treco Spur Red Gala No. 42  
(U.S. Plant Pat. No. 7,396) have stripes showing under-  
neath their red colour. Applewaites is a block red apple  
and has no stripe associated with the red colour devel-  
opment of the fruit. The colour of the Applewaites fruit  
is also distinctly different from the Galaxy fruit colour  
as indicated in the following colour measurements.

The colour designations hereinafter set forth are ac-  
cording to the Munsell Colour System using a Minolta  
colour meter.

Tree: Weak vigour; spreading habit; predominance of  
bearing on shoots.

Dormant one year old shoot (observed in winter on  
trees at least three years old): No pubescence on  
upper half; medium thickness; medium number of  
lenticels; dark brown colour on the sunny side; me-  
dium bud size; pointed bud tip; position of bud rela-  
tive to axis; adpressed; small bud support; dormant  
fruit bud shape (on spurs), conical; 25

Colour of laterals.—Brown 5 GY 1/8-2.5 GY 2/11;  
pronounced white lenticels present.

Flower: colour of bud just before flower opens, pink;  
time of beginning of flowering (10% of flowers),  
medium; full bloom dates for the years 1986-1993  
range from 5 October to 12 October. Petal colour of  
open flowers is 7.5RP7/3. The outside of the bud is a  
deep pink colour 7.5RP4/8. 35

Observation of flowers at start of anther dehiscen-  
ce.—Flat or slightly cupped shape; large size  
(4.5-5.0 cm); position of margin of petals, free.

40 Leaf (Mature observed in summer when they form one  
thrid of an upright growing shoot on the outside of  
the tree): Early bud burst; pose of leaf, outwards,  
medium leaf size; from 4th to 6th fully expanded leaf,  
length 95 mm, width 49 mm; length/width ratio of

blade, medium; shape in cross section, concave; indentation of margin, serrate; medium glossiness on upper side; weak pubescence on lower side; medium petiole length, medium stipule size; colour of leaves from top of terminated laterals, green 7.5 GY 2/14-7.5 GY 1/7; leaves from growing lateral, lighter green 5 GY 3/21-5 GY 4/29.

## Fruit:

Size.—Medium; length 66 mm, breadth 71 mm. 10

Shape.—Medium conical; symmetric in side view; weak crown at distal end.

Eye.—Closed; medium size.

Eye basin.—Medium depth; medium width; ribbing present. 15

Sepals.—Medium length; overlapping at base.

Stalk.—Thin; long.

Stalk cavity.—Deep; medium width. 20

Skin.—Ribbing present, not prominent; smooth surface; bloom, absent; greasiness, absent; cracking tendency, absent; medium skin thickness; green yellow ground colour - 10 YR 2/38-5Y 1/33. 25

Overcolour.—High percentage of overcolour - 70-90%; strong dark red 5R 10/45-2.5R 6/30; solid flush; low amount of russet around stalk.

Lenticels.—Medium size; noticeable on highly coloured areas of skin.

Flesh.—Firm; white-yellow 10 Y 3/21-10 Y 1/12; fine texture; juicy.

Flavour.—Medium sweetness; weak acidity.

Calyx tube.—Medium length; medium width; Y shaped.

Sinus.—Closed.

Distinctiveness of core-line median through locules.—Weak when observed in cross section.

Aperture of locules.—Closed in cross-section.

Central cavity.—Absent in cross-section.

Ripening.—For eating, medium; 2 days later than Cox's Orange Pippen.

Seed.—Medium size; brown colour when dry, 5 GY 3/23.

## I claim:

1. A new and distinct variety of apple which is a mutation of the Gala variety (U.S. Plant Pat. No. 3,637) substantially as shown and described, characterised by an overall strong dark red colour.

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U.S. Patent

May 10, 1994

Plant 8,720

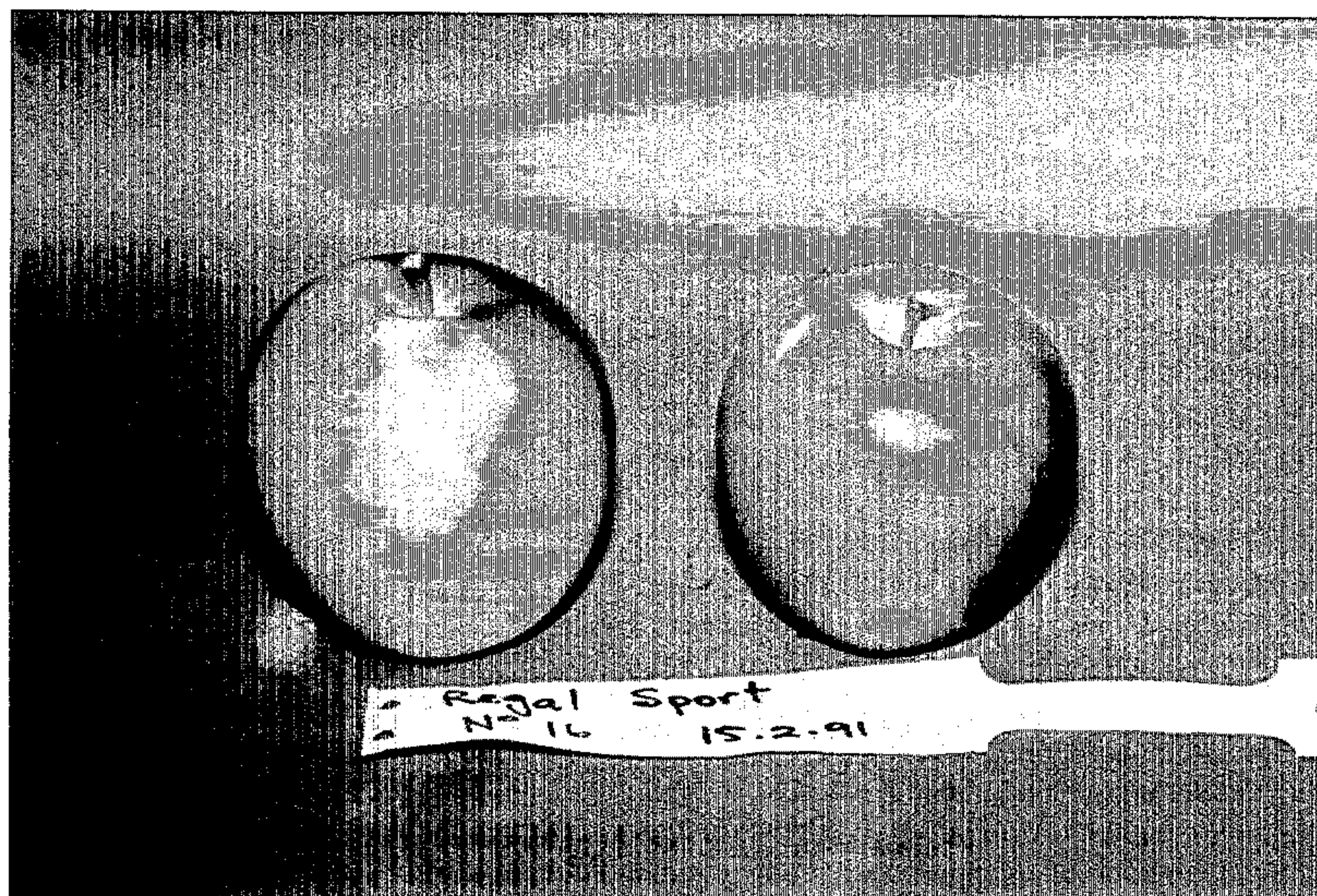


FIG 1