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(12) **United States Plant Patent**
Skelton

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(54) **KIWI PLANT NAMED 'SKELTON A19'**
(50) Latin Name: ***Actinidia chinesis***
Varietal Denomination: **Skelton A19**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 3 days.

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A01H 5/00 (2006.01)

(52) **U.S. Cl.** **Plt./156**

(58) **Field of Classification Search** Plt./156
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct kiwi plant of the species *Actinidia chinensis* is described. The cultivar results from a controlled pollination using a male *A. chinensis* selection 'RY,' and a female *A. chinensis* selection 'A124.' Both named parents ('RY' and 'A124') are unpatented cultivars. The new cultivar is distinguished by its medium fruit size, obovoid fruit shape, greenish-yellow fruit coloring, and its medium to early harvest date in early April.

6 Drawing Sheets

FIELD OF THE INVENTION

Genus and species of plant claimed: *Actinidia chinensis.*

PRIORITY CLAIM

The present application claims priority from New Zealand Plant Variety Rights Application No. KIW026, entitled 'SKELTON A19' filed Dec. 22, 2006, with the Commissioner of Plant Variety Rights in New Zealand, which is herein incorporated by reference.

BACKGROUND OF THE INVENTION

Kiwi plants in cultivation are mainly varieties of *A. deliciosa,* particularly 'Hayward' although some *A. chinensis* and *A. arguta* varieties are grown. *A. deliciosa* and *A. chinensis* are closely related and varieties of both types have large fruit (about 100 g) with hair on the skin. The main varieties in New Zealand are 'Hayward' (*A. deliciosa*) and 'HORT16A' (*A. chinensis*). Fruit are usually cut and eaten with a spoon.

All *Actinidia* species are dioecious, so female varieties have to be interplanted with male pollinizers to ensure fruit production.

A. chinensis vines are deciduous and tend to grow vigorously in spring and summer when rapidly-growing shoots can intertwine and tangle if not managed. Vines do best in a mild warm-temperate climate without late spring or early autumn frosts. They produce consistently heavy crops when grown in well-drained fertile soils and given regular irrigation in dry spells.

A. chinensis flowers in late September to late October in New Zealand. Harvest of *A. chinensis* fruit occurs from late February to late June in New Zealand depending on the selection and location of plantings.

SUMMARY OF THE INVENTION

The present invention is a new and distinctive kiwifruit variety having a medium sized obovoid fruit shape, a fruit flowering date of early October, with a fruit harvest date of early April. This new variety is designated 'Skelton A19' and

is derived from a controlled pollination using a female *A. chinensis* selection 'A124' and a male *A. chinensis* selection RY of unknown parentage.

Neither of the parents are registered with the Plant Variety Rights Office in New Zealand or patented. The parent plants are part of an ongoing breeding program established in New Zealand in 1975.

This new variety was created during the course of a planned plant-breeding program, which was initiated in Waiuku, New Zealand in 1994 and approximately 300 seedlings were raised at Rangiriri, New Zealand. 'Skelton A19' first flowered in October 1998 and fruit were assessed in April 1999. Following fruit assessment, 'Skelton A19' was grafted onto ten *Actinidia deliciosa* seedling rootstocks and onto ten *Actinidia chinensis* seedling rootstocks. The unique characteristics of 'Skelton A19' continued and the asexually reproduced plants were true to type.

The new variety can be asexually reproduced as cuttings or by grafting or budding on to seedling or cutting-grown rootstocks of *A. deliciosa* or *A. chinensis,* or by striking cuttings, or by tissue culture. Trial plantings of grafted plants established in Rangiriri, New Zealand in 1999 have shown that the unique combination of characteristics come true to form, are established, and transmitted through succeeding asexual propagations.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** shows typical fruit of the new variety in the studio;

FIG. **2** shows typical fruit of the new variety in the orchard;

FIG. **3** shows typical fruit of the new variety in cross-section;

FIG. **4** shows typical fruit of the parent female A124 species in the studio and in cross-section;

FIG. **5** shows typical fruit of the new variety in the studio compared with other varieties, in order: 'A1'; 'Skelton A19;' 'Skelton A16;' and 'Skelton X78;' and

FIG. **6** shows typical fruit of the new variety in the studio compared with other varieties in cross-section, in order: 'A1;' 'Skelton A16;' 'Skelton A19;' and 'Skelton X78.'

COMPARISON TO CLOSEST VARIETY

The distinctive characteristics of 'Skelton A19' were first observed with the first fruit maturing in April 1999. The distinctive characteristics of this new Kiwi variety, described in detail below and shown in the accompanying photographs, were observed in April 2006 at Rangiriri, New Zealand. The age of the plants was approximately seven years from grafting onto seedling rootstocks.

Comparison with the similar variety 'HORT16A' (U.S. Plant Pat. No. 11,066) shows that 'Skelton A19' may be distinguished as follows in Table 1:

TABLE 1

Comparison With Similar Variety.
Observations made under New Zealand Growing Conditions

Characteristic	HORT16A	A19
FRUIT		
Harvest Date	Early May	Early April
Color of Ripe Pericarp	Medium yellow (12C/12B)	Yellow (3B)
Skin Color	Yellow-brown 199B	Yellow-brown 199B
Mean Fresh Weight	43-176 grams	95-105 grams
Mean Dry Matter at Harvest	18%	14.5-17.5%
Average Length	79.1 mm	70.0 mm
Average Width	51.1 mm	46.0 mm
Core Diameter	12.4 mm	16.5 mm
Width/Length Ratio	0.65	0.61
Sweetness (Brix) at maturity for consumption	15.6%	16.5%
General Shape	Ovoid	Obovoid
Cross sectional shape	Circular	Circular
Shape at Stylar End	Strongly blunt protruding	Slightly blunt protruding
Skin: Hairiness	Present	Low/downy
VINE		
Shoots:		
Color	144B	144C
Texture	Smooth	Smooth
Stem:		
Colour-upper	177A	166A
Colour-lower	199A	199A
Mean diameter	9.5 mm	9.5 mm
Texture	Smooth	Smooth
Lenticel (if present)	Present	Present
LEAF:		
Colour-upper	147A	138A
Colour-lower	148B	138C
Shape	Orbiculate	Broadly Orbiculate
Length	124 mm	114.1 ± 15.7 mm
Width	151 mm	128.8 ± 20.5 mm
Apex	Acute	Retruse
Base	Cordate	Cordate
Margin	Ciliate	Ciliate
Texture	Glabrous	Glabrous
FLOWER		
Inflorescence:		
Predominant number of flowers	3	3

TABLE 1-continued

Comparison With Similar Variety.
Observations made under New Zealand Growing Conditions

Characteristic	HORT16A	A19
Petiole:		
Length	103 mm	42.9 ± 8.1 mm
Colour	145B	146C
Pedicel:		
Length	27.1 mm	34.0 ± 7.0 mm
Colour	151A	145A
Hairs	Present	Present
Length of hairs	Very short	Very short
Flower:		
Coloration of petals	Bi-coloured	Bi-coloured
Primary Colour	White 155B	White 155C
Secondary colour base of petal	Green 144D	Green 144C
Diameter	51 mm	42.9 ± 2.9 mm
Arrangement of Petals	Overlapping	Overlapping
Mean number of petals/flower	6	6-7
Mean length of petals	28.8 mm	20.2 ± 1.3 mm
Mean width of petals	23.9 mm	14.8 ± 1.8 mm
Petal ratio of length to width	1.21	1.36
Petal shoulder	Present	Present
Filament colour	Green/White 157A	Green/White 157B
Anther colour	Yellow 16C	Burnt orange 17B
Attitude of styles	Semi erect	Semi erect
Curvature of styles	Absent	Absent
Colour of styles	White 155D	White 155C
Amount of hair on ovary	Dense	Dense
Colour of ovary	White 157B	White Green 157C
Number of sepals	6-7	6-7
Colour of sepal	Green 148D	Green with orange brown margin 148C
Length of sepals		
Range	8.7-12.4 mm	5.9-8.0 mm
Mean	11.4 mm	6.8 ± 0.6 mm
Sepal diameter	9.1 mm	4.7 ± 0.6 mm
Flower Opening	Mid October	Early October
Vegetative bud break	Early September	Early September
Plant/fruit disease & pest resistance	None	None
Plant hardiness zone or heat/cold resistance	Not Known	Not known

Color references are in accord with the R.H.S. Colour Chart, the Royal Horticultural Society, London, 2001

The most striking difference between 'Skelton A19' and 'HORT16A' is that of fruit shape, flowering and harvest times. 'Skelton A19' obovoid fruit have slightly blunt protruding stylar end, whereas 'HORT16A' are ovoid with a strongly protruding blunt stylar end. In addition the flowering and harvest dates of 'Skelton A19' are approximately two weeks prior to that of 'HORT16A' in early October and early April, respectively.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A new and distinct kiwi plant of the species *A. chinensis* substantially as herein described and illustrated.

* * * * *

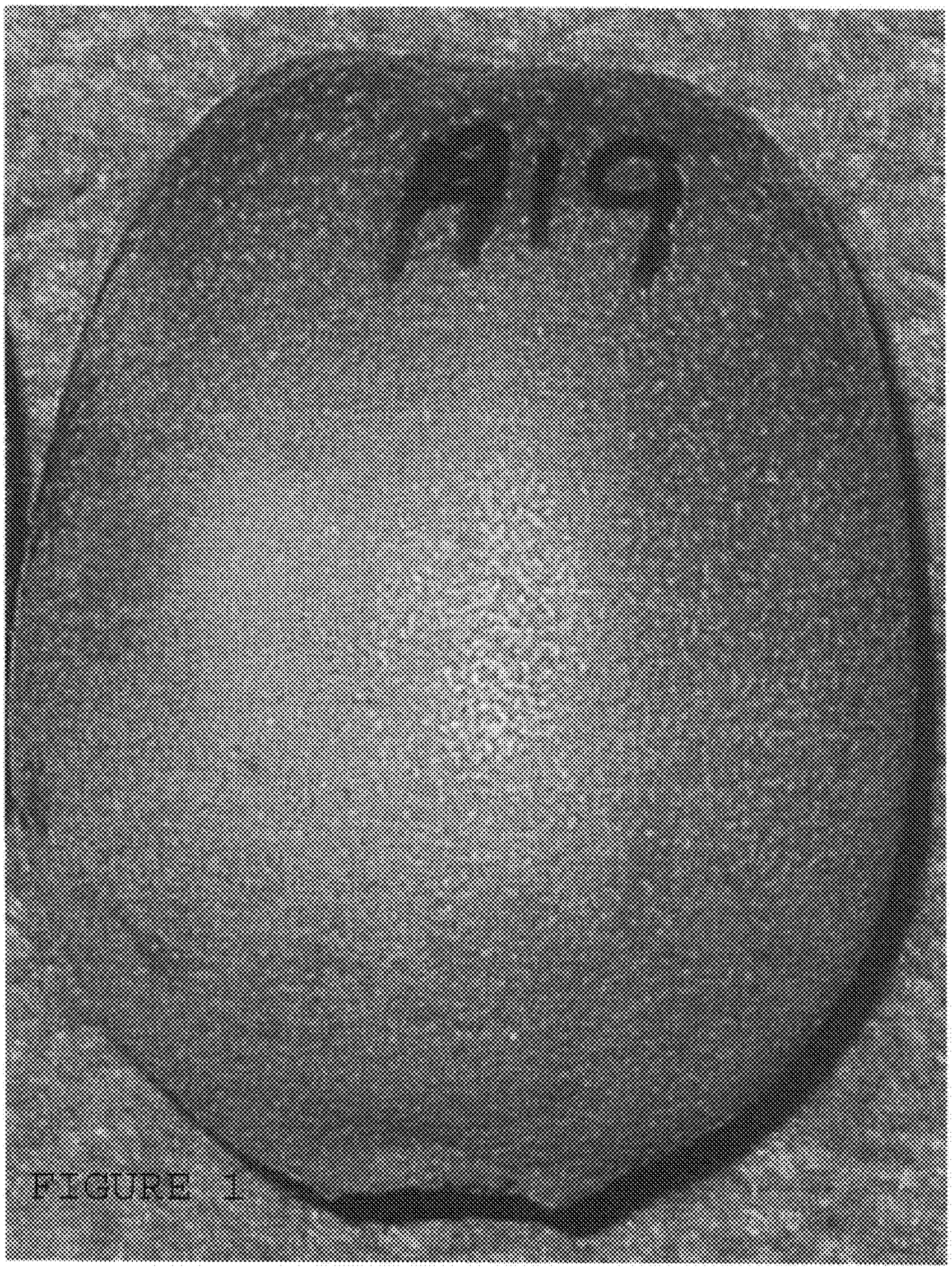


FIGURE 1

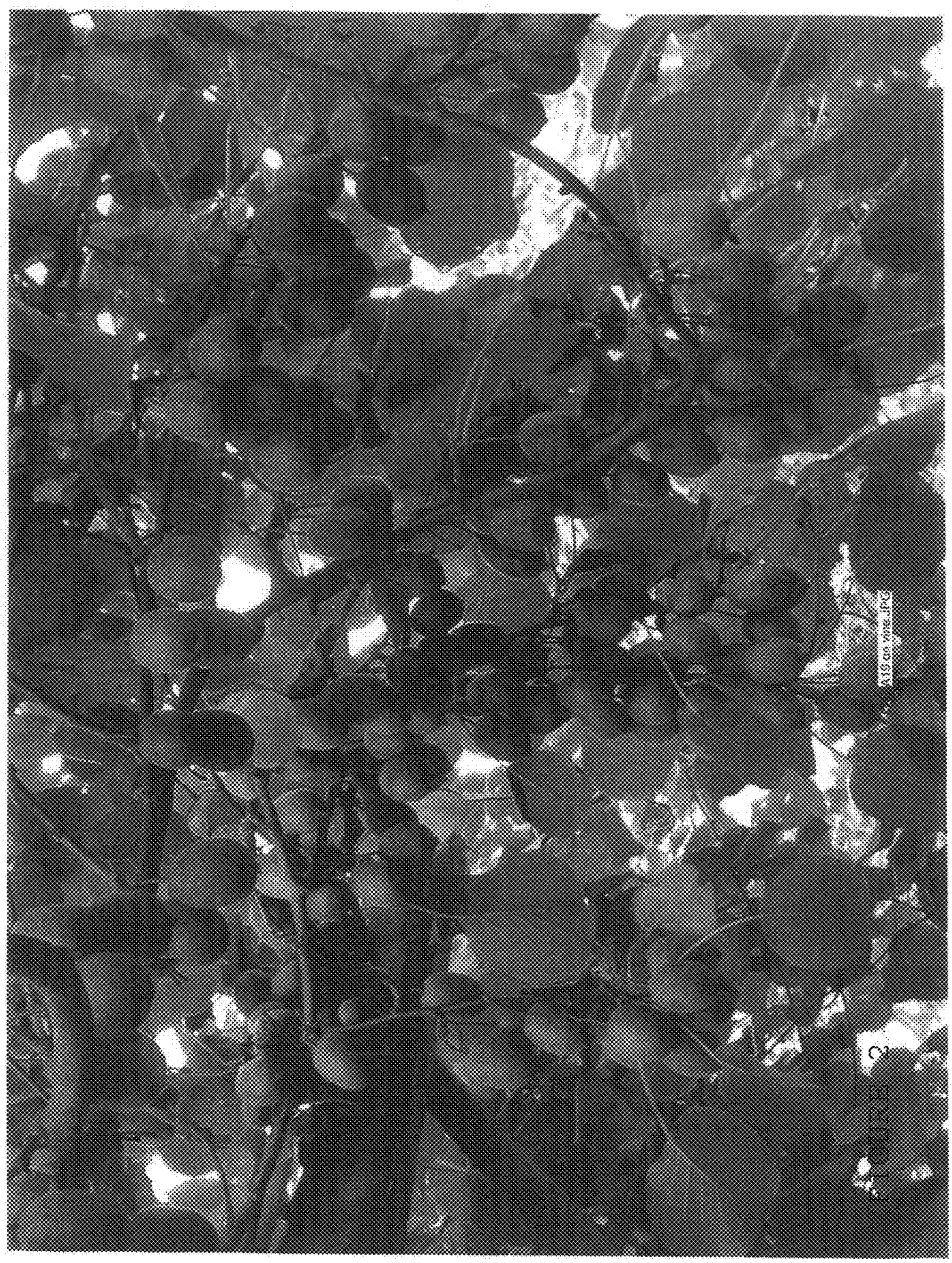


FIG. 2

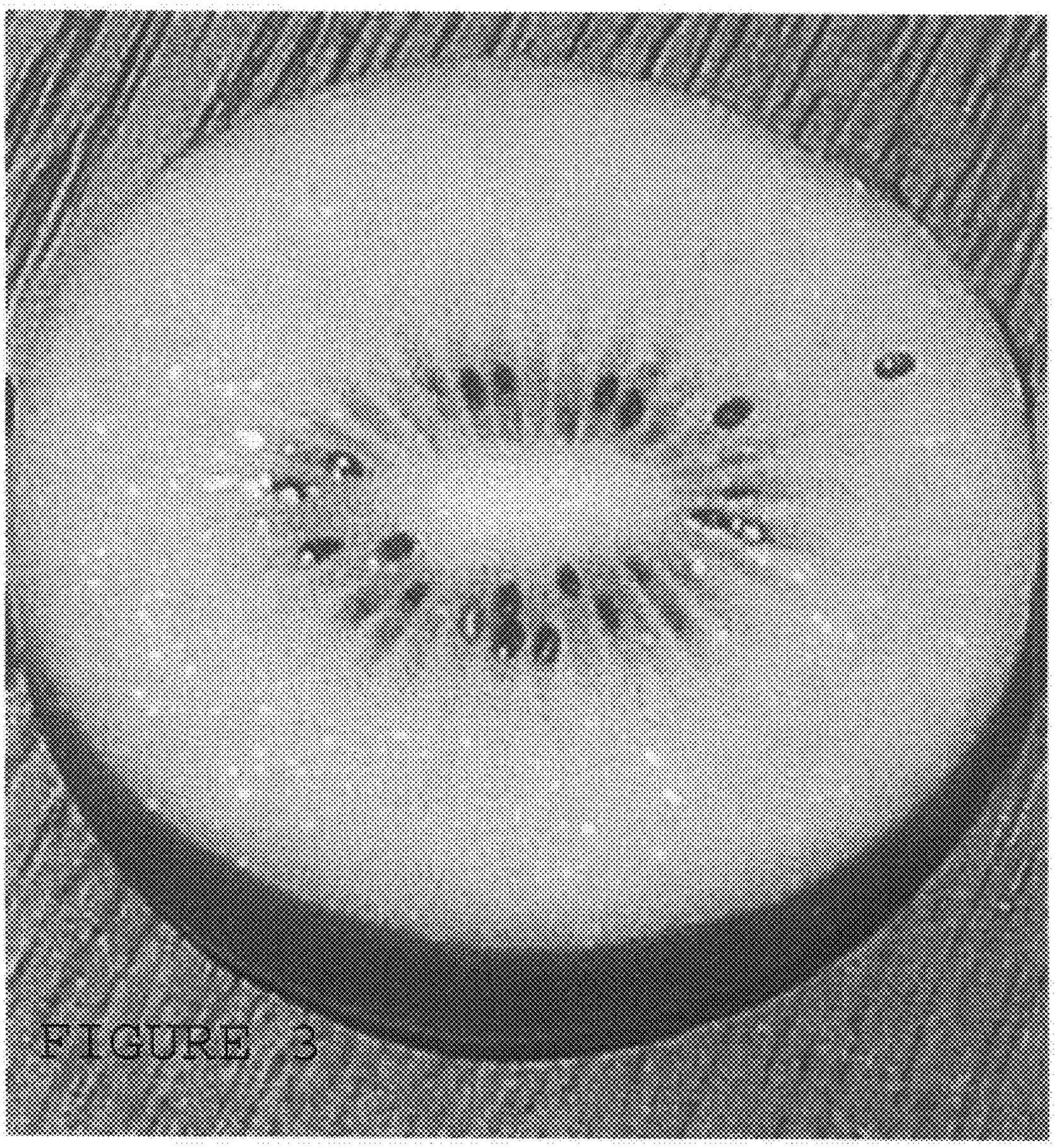
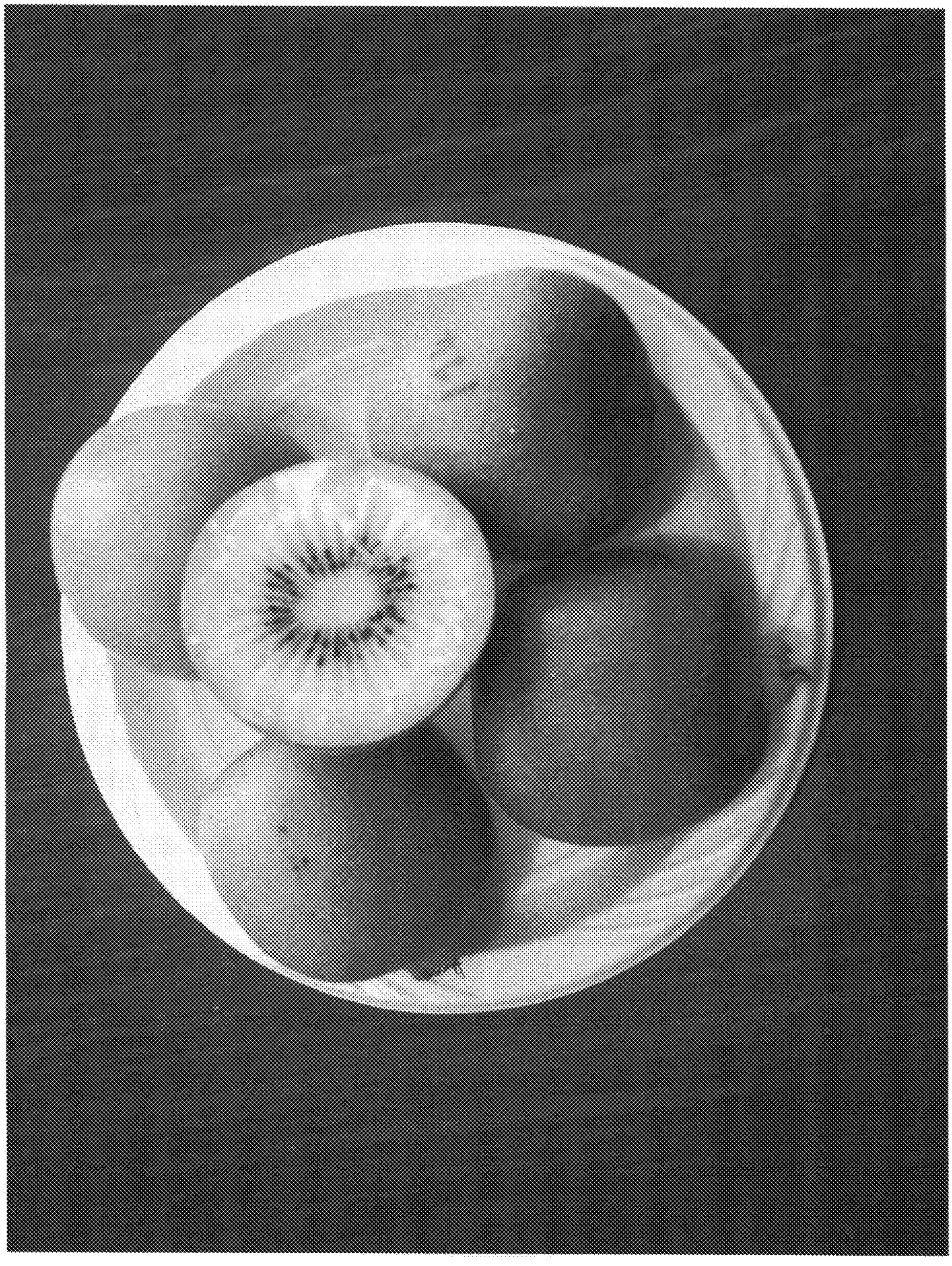


FIGURE 3



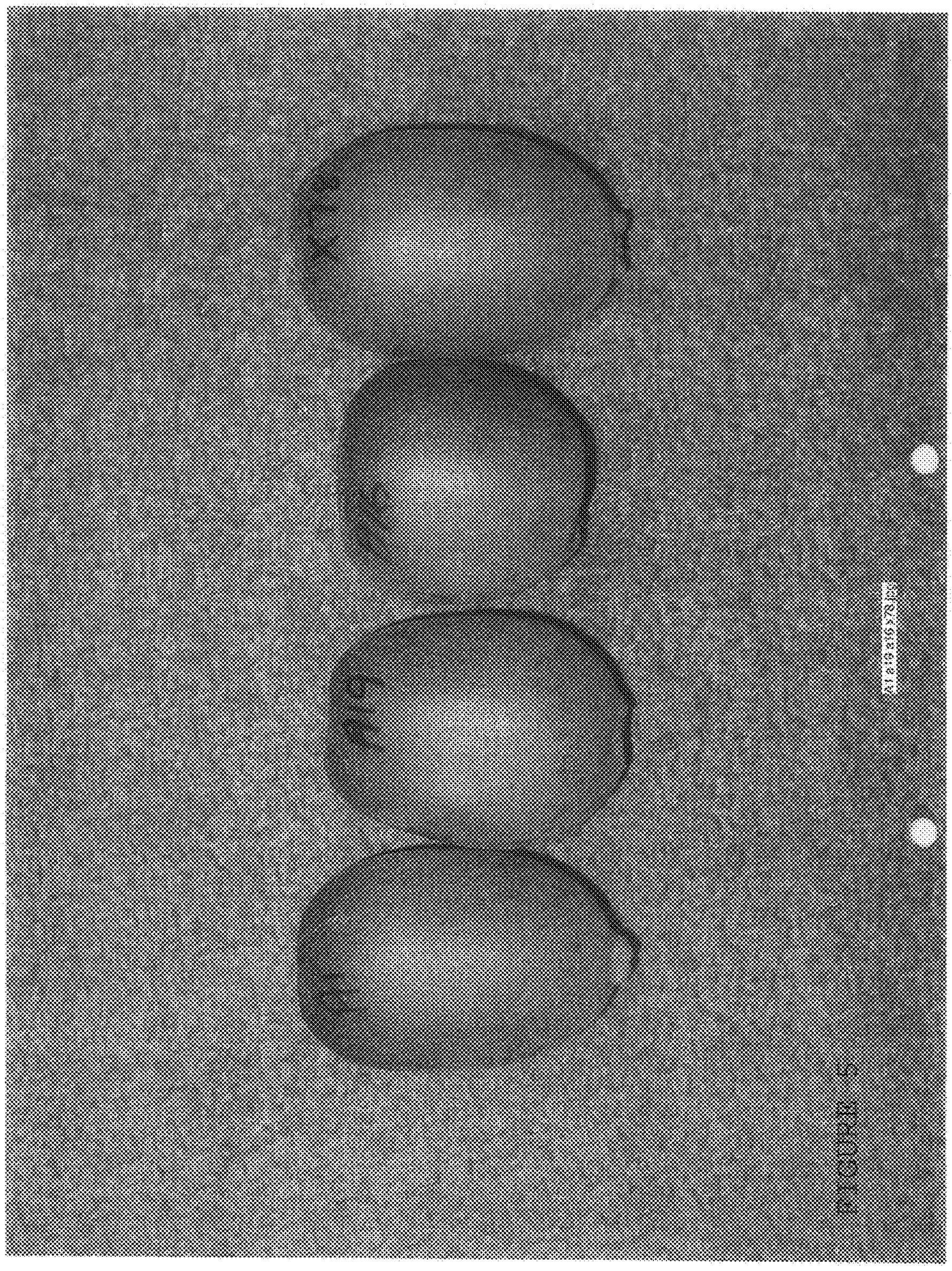


FIG. 4

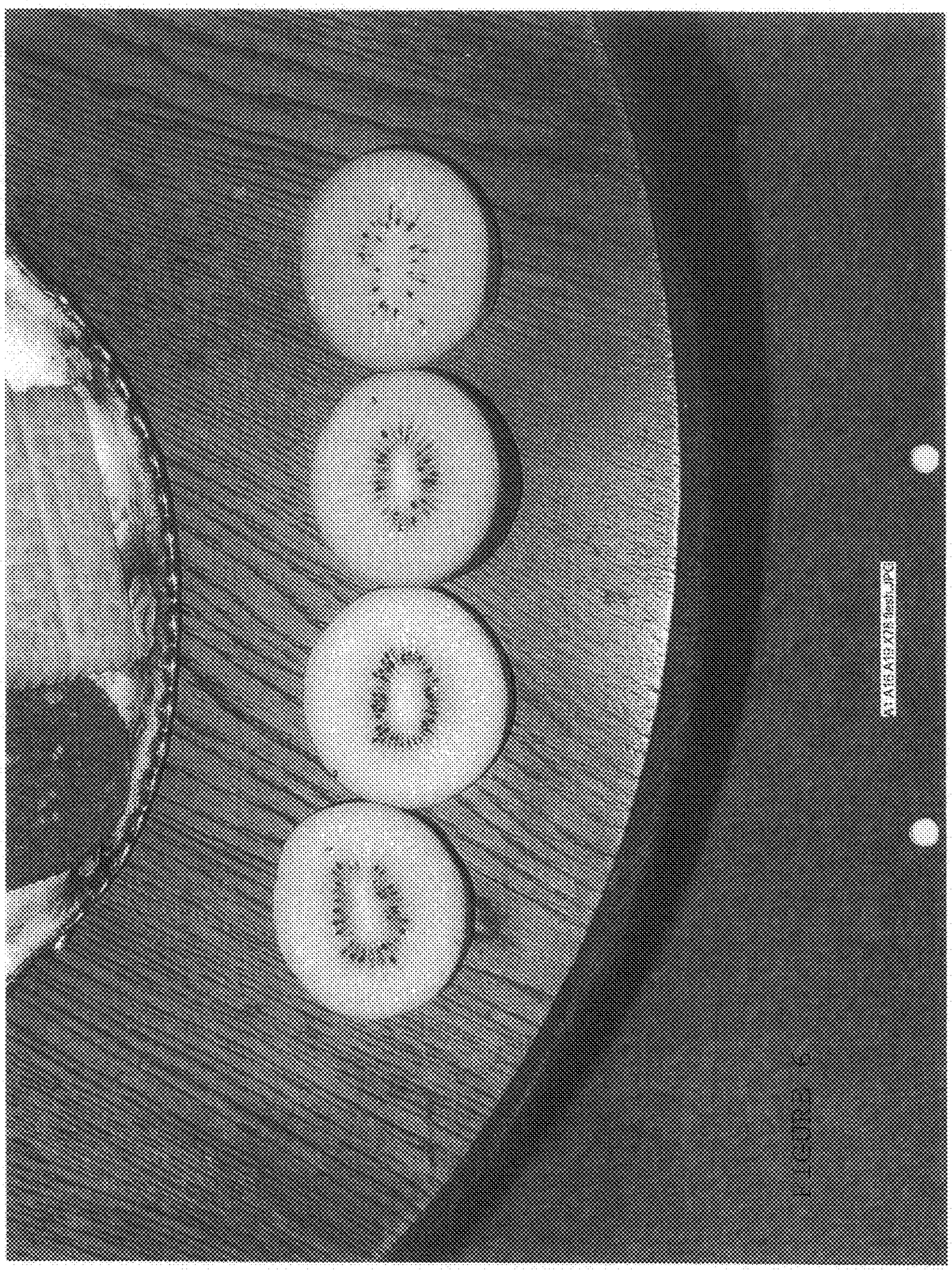


FIG. 6