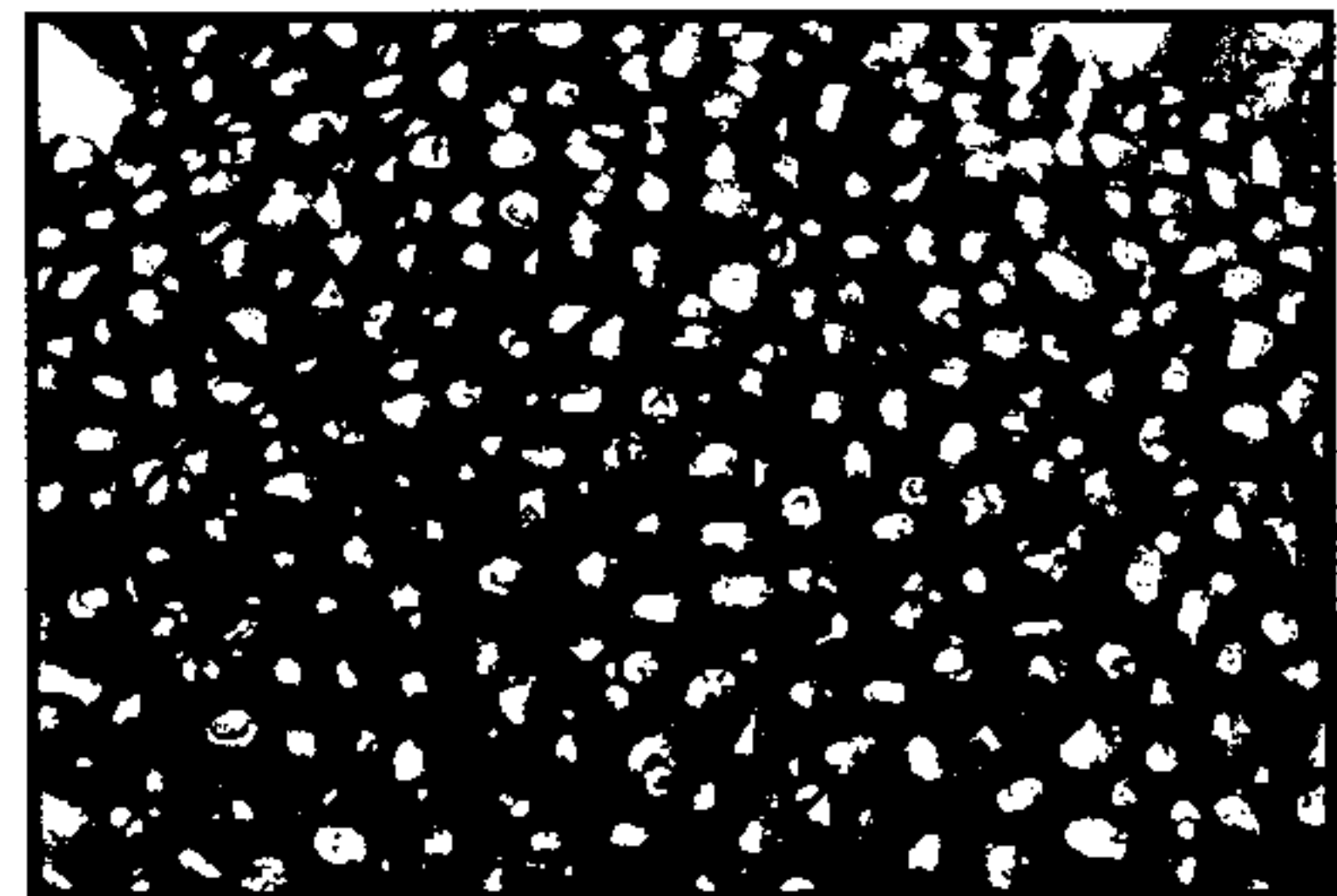
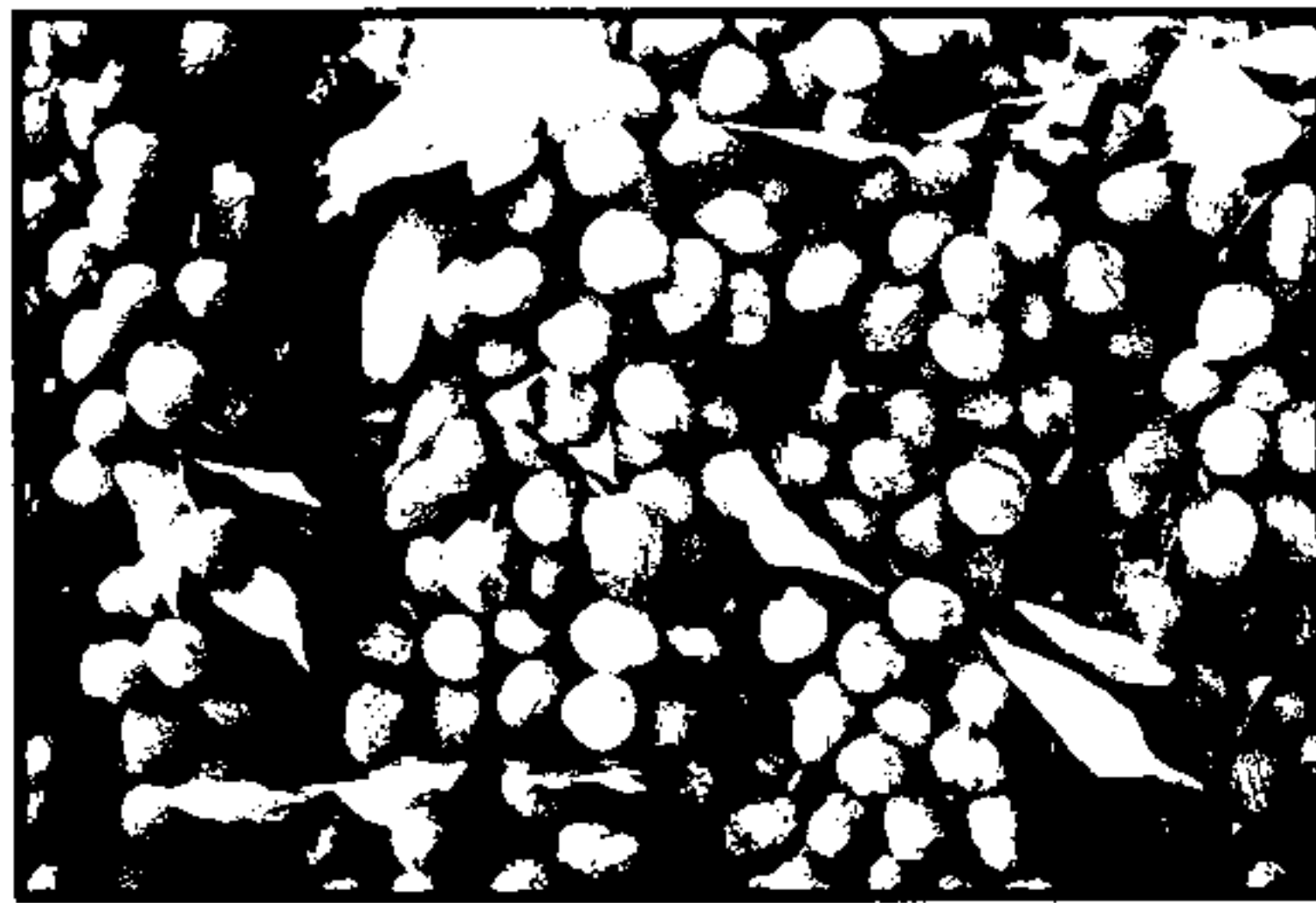
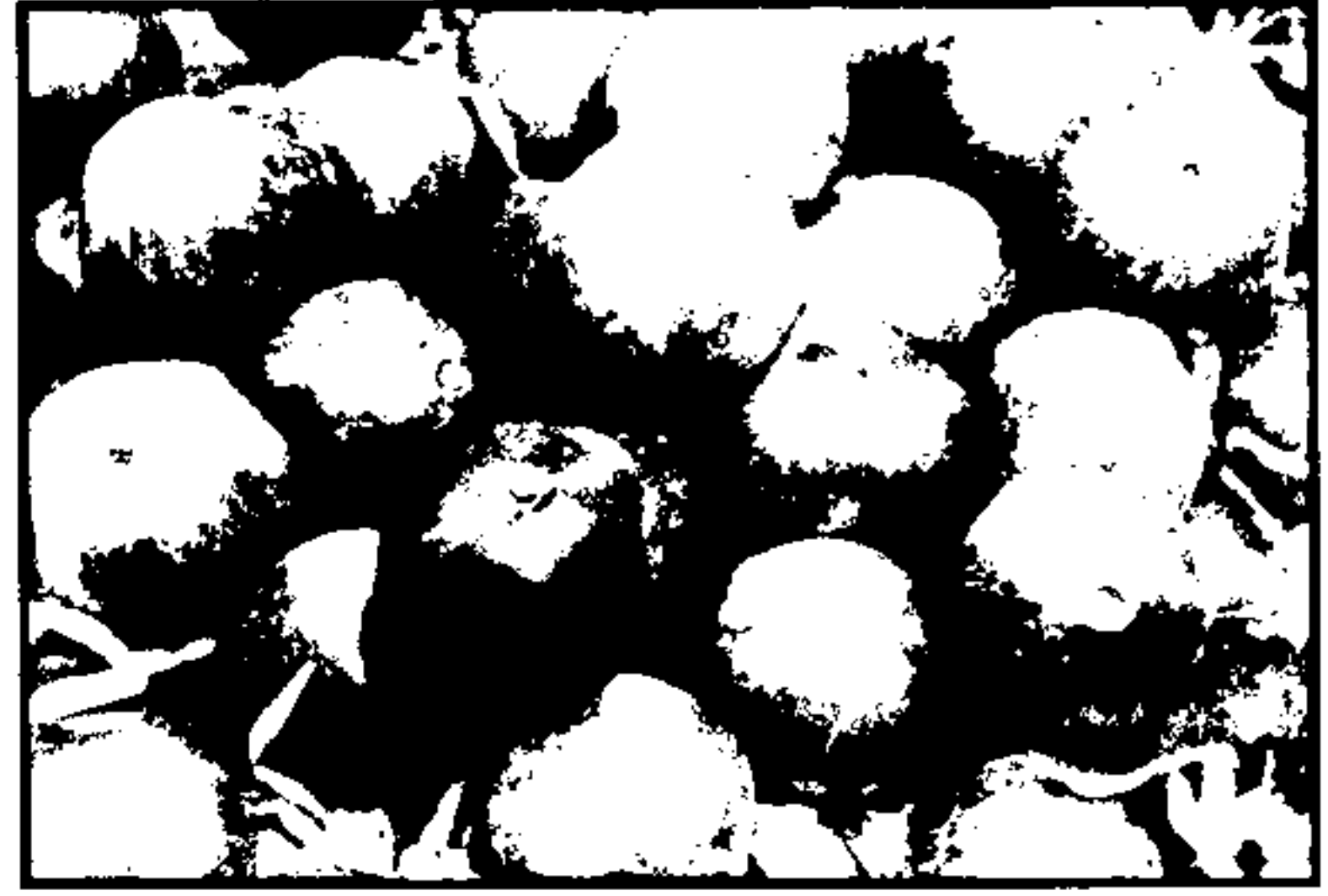


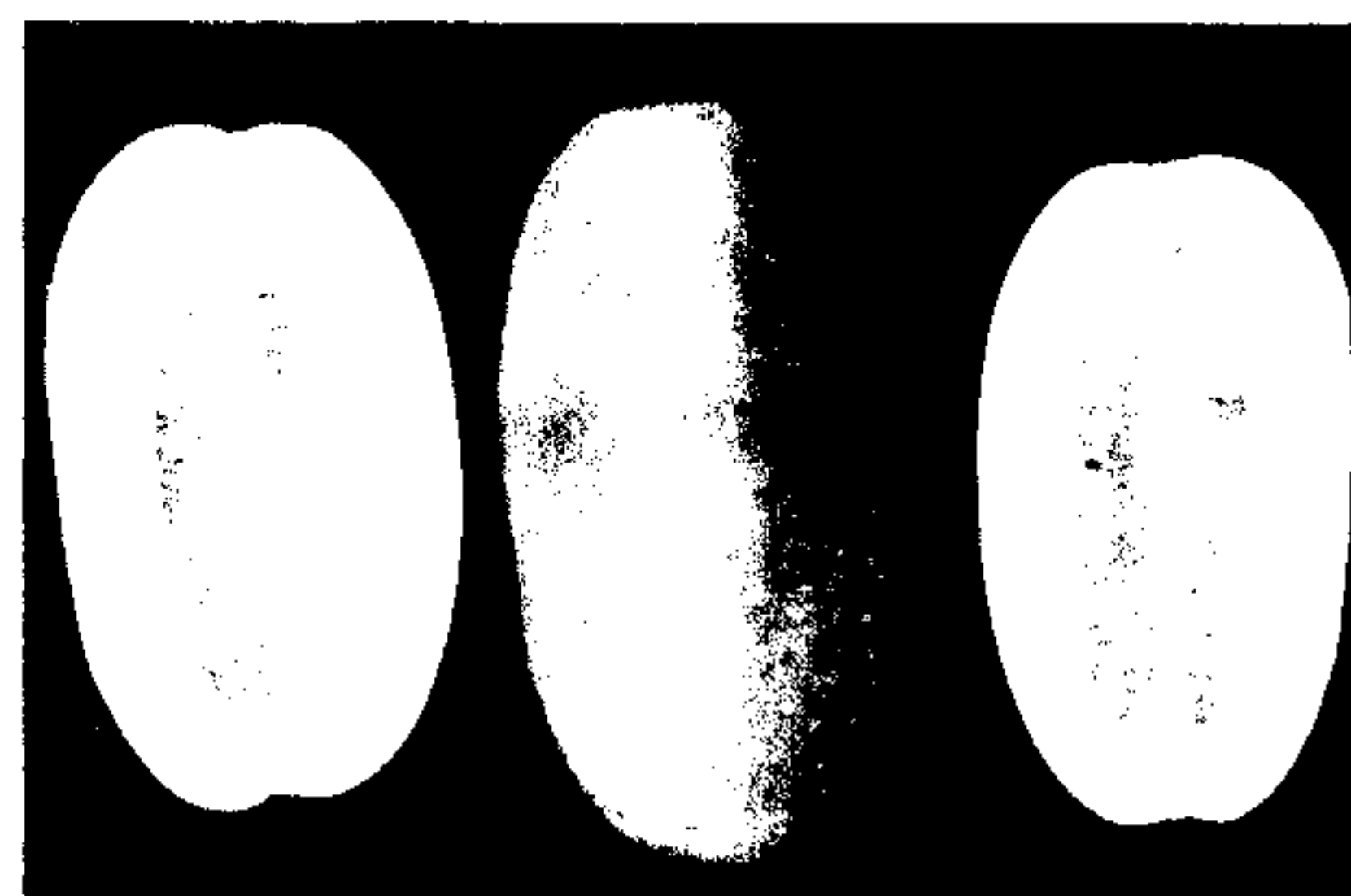
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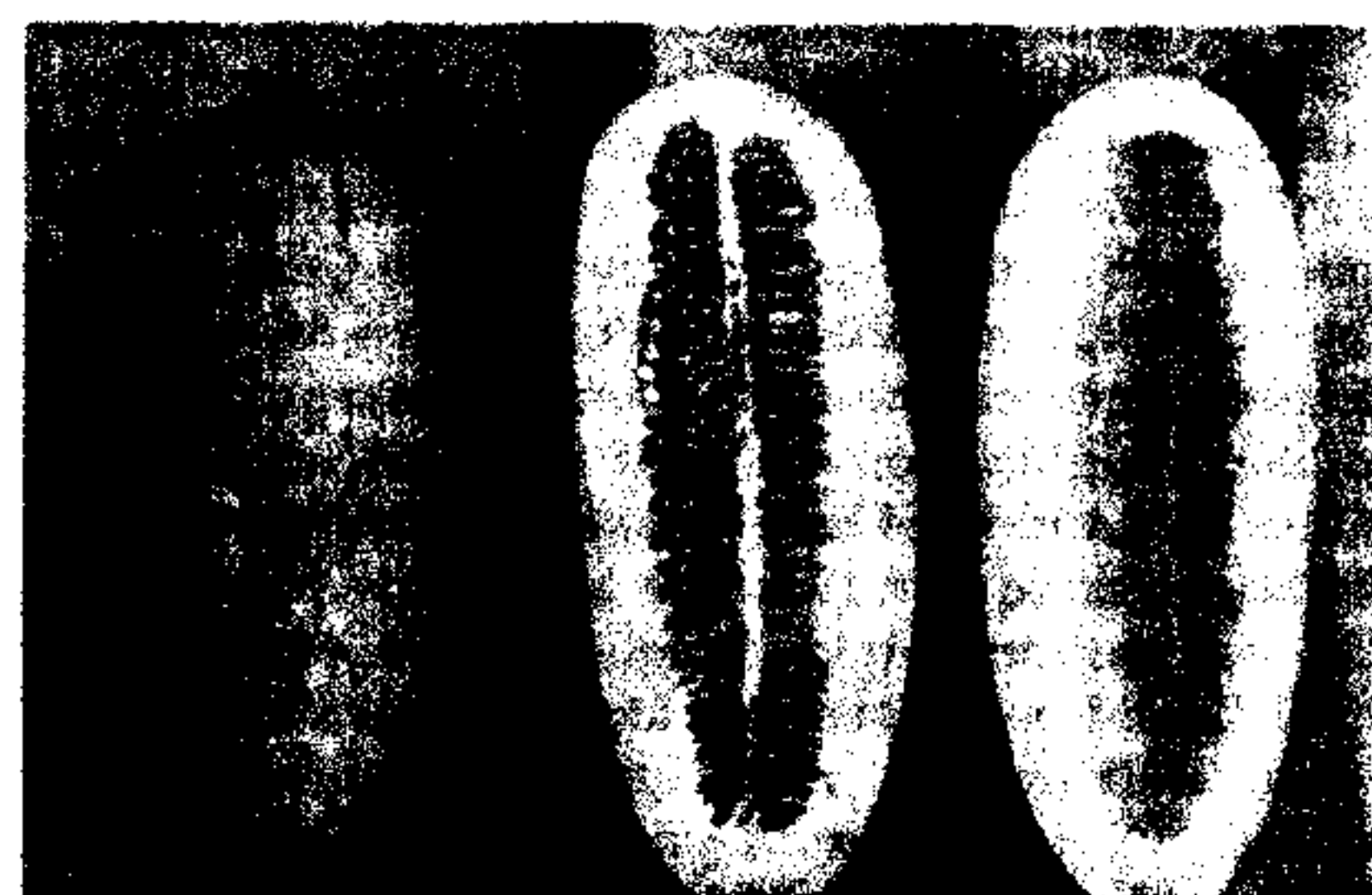


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Snapmelon is a popular cucurbit vegetable cultivated in arid and semi-arid regions of western India. So far, there is no commercial variety of this drought hardy crop that could give good quality fruits and higher returns. AHS 10 and AHS 82 snapmelons have been developed at CIAH, Bikaner, which could give sustained yield of superior quality produce.



Snapmelon AHS 10 in fruit-bearing stage (left) and mouth-watering fruits (right)



AHS 82 in fruit-bearing stage (left) and fruits ready for marketing (right)

SNAPMELON or *phoot* (*Cucumis melo* var. *momordica*) is a popularly grown vegetable in arid and semi-arid regions of Rajasthan.

Its mature but unripe fruits are used to prepare *rayta*. Ripe fruits are used as dessert or as *salad*. They are also dehydrated for off-season use. These

are locally called *khelera*. Seed kernels are extracted and are extensively used in sweets and bakery products. Genotypes were characterized for

earliness, fruit size, number of fruits/plant, flesh quality and taste. Of the promising genotypes, AHS 6, AHS 10, AHS 50, AHS 54, AHS 64 and AHS 82, AHS 10 and AHS 82 have been recommended for cultivation. These have now been widely accepted for commercial cultivation in arid regions.

AHS 10

It is an early, high-yielding selection from local land races of arid region. Fruit become ready for harvesting 67–69 days after sowing. Its fruits are oblong and medium-sized, 850–950 g in weight, 17–20 cm in length and 9.7–10.5 cm in diameter. Edible flesh thickness is 2.1–2.6 cm and the fruit cavity is 5.5–6.1 cm wide. The whitish pink flesh is sweet in taste having 4.5–5.0°Brix. Male and female flowers appear 26 and 38 days after sowing. Ripe fruits can be harvested 67–120 days after sowing. Its vines are medium in vigour with 2.5 m length and 8.5 branches. It is highly productive, giving 4.0–4.5 fruits/plant (202–222 q/ha).

AHS 82

This selection yields uniform, medium-sized and long fruits. Sowing can be done twice in a year, i.e. summer (February–March) and rainy season (June–July). Male and female flowers appear 28 and 35 days after sowing, respectively. First harvesting can be done 67–70 days after sowing which continues up to 110–115 days. Each vine bears 4.5–5.0 fruits giving an yield of 225–248 q/ha. Fruits are 900–950 g in weight, 22.5–24.5 cm in length and 9.0–9.2 cm in diameter. Edible flesh thickness is 2.1–2.41 cm with 5.4–6.0 cm wide fruit cavity. The flesh is sweet (4.3–4.9°Brix), tasty and light pink in colour.

THEIR CULTIVATION

Sowing

In western India, best time of

sowing is February–March for summer crop and June–July for rainy season irrigated crop. Sowing is done with the onset of monsoon (July) for a rainfed crop. Sowing can be done on raised beds, in channels or furrows or in pits. Channel system of cultivation is most practicable. This saves losses of water and nutrients, helps in proper care of young seedlings and offers ease in weeding, spraying and dusting.

Preparation of channels

Channels are prepared after preparation of field by ploughing 2–3 times followed by planking. Channels 60–70 cm wide and 20–30 cm deep are made at a distance of 2.0–2.5 kg seed is sufficient for a hectare. Prior to sowing, seed should be soaked for about 6–8 hours in fungicide solution containing 2 g bavistin/litre of water. Two–three seeds are sown at each spot. After germination when plants are 8–10 cm in height thinning should be done retaining one or two plants at each position.

Manuring

The field should be supplied with 200–250 q/ha farmyard manure at the time of last harrowing (about 15 day before sowing) in addition to application of fertilizers to provide 80 kg N, 40 kg P and 40 kg K/ha. Half of N and full of P and K should be given at the time of preparation of channels. Also incorporate methyl parathion (2%) or quinalphos (1.5%) dust @ 20–25 kg/ha before sowing. The remaining half dose of N should be applied in two split doses, first at the time of vine spreading (25–30 DAS) and the other 40 days after sowing. Foliar application of urea (20 g/litre water) helps maintain good plant growth and vigour.

Interculture

Interculture is done 20–25 days after sowing to keep its crop weed-free. About 2–3 weeding and hoeing

operations are required. During summer, irrigation should be done as 8–12 days interval or frequently in rainy season. In *kharif* season, protective irrigations may be required during fruit setting in dry spell.

Harvesting

Snampmelon as a short duration crop becomes ready for harvesting 67–70 days after sowing. Harvesting of fruits continues 110–120 days after sowing. Fully matured fruits are harvested for distant markets while ripe ones are harvested for domestic market.

Crop protection

In arid region, snampmelon is attacked by red pumpkin beetle, epilachna beetle, fruit fly and aphid. At early growth stage (cotyledon stage to 1–2 true leaf stage), beetles cause devastating losses, resulting in very poor plant stand in field. Spraying of dimethoate @ 1 ml/litre of water or sevin @ 2 g/litre controls beetles and metasystox or monocrotophos @ 1 ml/litre controls aphids and fruit fly. Dusting of methyl parathion (2% dust) along with wood ash (in 1:50 ratio) at 2–4 leaf stage of crop growth during morning hours is most effective to manage beetles. Although disease occurrence is very rare in arid regions, preventive sprays of Dithane M-45 (0.2%) and bavistin (0.2%) at 15 days interval may be required.

SUMMARY

The AHS 10 and AHS 82 are good snampmelons. They are recommended for arid and semi-arid regions.

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