腰果文摘选辑

说明

1. 为响应党大办农业，大办粮食的伟大号召，我馆组编制有关热带亚热带有毒植物文摘及索引，其中包括腰菜油棕芋麻，橡胶蓖麻等。

2. 腰菜是一种热带经济作物，目前在我国还没有广泛栽种，尚在试验研究，有关的中文资料暂付缺如。

3. 西文资料，在国内外可供参考者不多，先将其中一部份资料分为下列数项，每项以著者姓氏先后为序。

1. 栽培技术，
2. 选种育种，
3. 生理生化，
4. 病虫防治，
5. 加工利用，
6. 研究动态，
7. 参考文献。

4. 我们限于水平，错漏甚多，希望读者多提意见，以便随时补充修正。

中国科学院中南分院图书馆
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Abraham, P.
Air layering is a success with cashew.
Indian Fmg, 1956, 5(10):26-7. illus., (received 1960).
Detailed instructions.

Agricultural Department of Madras.
Administration Report of the Agricultural Department for the Fasli Year 1955-56, 1957, pp. 256, illus.
Work at the agricultural research stations includes; mulching of ginger, varietal and roctstock trials with apples, dormancy breaking in apples, sugar cane varietal trials, time of planting and ratooning of sugar cane, cashew propagation, leaf composts from jackfruit, gliricidia and sesbania, and coconut cultivation, manuring and breeding.

Agriculture Department of Madras.
Administration Reports of Subordinate Officers of the Department of Agriculture, Madras, for 1948-49.
Horticultural Abstracts. V.22, 1952. pp. 154, No. 1105.
Superintendent Goverrment Press, Madras, 1951, pp. 455.
Work on cashew nut concerned manuring and methods of vegetative propagation.

Albuquerque, S. D. S., Hassan, M. V., and Shetty, K. R.
How best to raise the cashew.
Indian Fmg, 1958, 7(10):13-14.
Land preparation, seed selection, planting and costs.

Albuquerque, S. D. S., Hassan, M. V., and Shetty, K. R.
Studies on the apple characters of cashew (Anacardium occidentale L.) Mysore agric. J., 1960, 35:2-8, bibl. 3.
Correlations were found between the size of the apples (swollen peduncles), the size of the nuts and the juice content. Yellow apples tended to be heavier, softer and less astringent than red apples. --Cent. Cashewnut Res. Stat., Mangalore.

Anonymous
Cashew.--The kidney-shaped fruit of the Anacardium occidentale, a tree of the East and West Indies. Both the nut and the fleshy stalk from which it grows, which is known as the

Cashew apple, are edible. The milky juice obtained from the fruit is sometimes mixed with chocolate, and is said to improve the flavour of Madeira wine. It is also used in the manufacture of varnishes. The nuts are imported for use in the manufacture of chocolates and confectionery. Pitman's Business Man's Encyclopaedia and Dictionary of Commerce. pp. 334.

Anonymous
Cashew nut (Anacardium occidentale) is a medium--sized tree belonging to the mango family Anacardiaceae. It is native to tropical America but also cultivated in the east. The fruit of the tree is a kidney-shaped nut, about an inch long with a hard testa containing an acrid black juice. The nut, after removal of the testa, is eaten either fresh or reasted and slated. Ground and mixed with cocoa the nuts make a good chocolate. Under the nut the floral axis swells up into a large pear-shaped body of a reddish-yellow color. This also is edible and the extracted juice is fermented to make a kind of wine, the plant also yields a gum which has the same properties as gum-arabic. The cashew-nut industry has made great strides in Western India, large quantities of kernels being exported to the U.S.A., Britain and European countries.
Chamber's Encyclopaedia. V. 3. p. 153, 1955.

Anonymous
Cashew nut (Anacardium occidentale) Bull. Imp. Inst. (Gr. Brit.) 44(2):99-102. 1946.
The cashew is a small evergreen with obovate leaves 12-18 inches long and 6-8 inches wide. It bears clusters of small yellowish flowers. The fruit consists of a swollen receptacle or "apple" with the kidney-shaped nut attached to the underside. The apple is fibrous and juicy and makes up about 94% of the fruit. The trees grow in almost any type of soil except where the subsoil is too brackish or where there is much frost. They can be propagated from nuts or by grafiting. Shade must be provided for the trees nutil they have grown 3-4 leaves. They can be planted as close together as 40 ft., or 20 ft. if thinned after 7-10 yrs. The tree responds to good cultivation but is generally not cultivated, and usually bear from the 3d to about the 15th yr. Good mature trees yield 4000-6000 nuts or about 80 lbs. Yields vary from 20 to 100 lbs. per tree. The nuts consits of an outer shell covering a soft honey-comb structure surrounding the pink skin-encased kernel. The honey-comb structure

contains the dark colored viscous liquid known as cashew nut shell oil. The nuts contain about 35% oil and 30% kernel. The nuts are roasted, the oil recovered mechanically, and the pink skin rubbed off by hand after drying. Most of the kernels are used for dessert purposes and to the U.S.A. At present, India is the main exporter (in 1939-40, 256,960 cwt.) and prepares her own production and probably also nuts imported from E. Africa.

Chittenden, Fred J.
Cashew nut
Dictionary of Gardening
The Royal Horticultural Society.Oxford. V.1. pp. 102. 1953.
Anacardium (origin doubtful)
A genus of about 6 species of everygreen trees with entire pinnately veined leaves flowers in terminal panicles. Fruit a kidney-shaped nut seated laterally upon a fleshy, wide, pear-shaped peduncle. It needs a light a fleshy loamy soil. Cuttings of ripe shoots with their leaves intact will root easily in sand under a hand grass in heat.--A occidentale' Cashew Tree of about 16 ft. oval, wedge shaped at base, vary blunt, notched, obovate oblong, entire, smooth, ft. smell reddish, fragrant. fl. yellow and red. In West India 1699, the kerrnel of the nut yields an oil and is edible after roasting.

Department of Agriculture of Jamaica.
Annual Report, Department of Agriculture, Jamaica. 1946-7, 1949, pp. 30. received (1950).
Transplanting technique developed on cashew nut.

Department of Agriculture of Jamaica.
Department of Agriculture, Jamaica. Investigations 1952.
Bull. Dept Agric. Jamaica 50, 1953, pp. 122.
Cultivated trees, shrubs and vines. Banana breeding, propagation and management; cacao introduction, propagation and variety trials; cashew selection.

Ducke, A.
O genero Anacardium na Amazonia Brasileira.
nacardoi, om the Nrazotoam Amazon.) Ann. Acad. Brasil Sci. 11:11-17. 3 pl. 1939.

Dyson, W. G.
Annual report on silvicultural research in the Madras Presidency for the year 1931-32. 1-35. 1932.
Strobilanthes reticulatus, a troublesome gregarious weed hindering tree regeneration in evergreen forest, can be destroyed by cutting back. Investigations indicate that teak seed of local origin is best for plantations. Promising results have been obtained in restocking openings in evergreen and deciduous forests, and by sowing up burnt patches in inferior types. Excellent results were obtained from the stump planting method with Dalbergia latifolia and Terminalia paniculata. Anacardium occidentale (cashew nut) is eash to raise on poor shallow laterite.
Biological abstracts. V. 8-2, 1934. pp. 1766. No. 16244.

Galang, Francisco G., and Felix D. Lazo.
Fruiting as related to vegetative growth in cashew, Anacardium occidentale L. Philippine Jour. Agric. 7(1):21-35. 3 fig. 1936.
Biological abstracts. V. 11-2, 1937. pp. 1967. No. 18274.

Haarer, A. E.
Usefulness of the cashew tree and nuts.
New Commonw., 1953, 25:500-1, illus.
The cashew tree flourishes on sandy soils of medium fertility in parts of the tropics, where there are distinct wet and dry seasons and a rainfall of 30-50 in. In Africa the tree is being grown in Tanganyika and Portuguese East Africa, partly for export to India, and a big production is planned in Nigeria. Methods of cultivation harvesting and processing are briegly discussed.
Horticultural abstracts. V.23, 1953. pp. 689. No. 4721.

Hanger, B. F., and others.
Notes on Kenya agriculture. v.--Plantation crops.
E. Afr. agric. J., 1959, 24:153-70.
Climate and soils, propagation, cultural practices, uses, etc., are briefly outlined for arabica and robusta coffee, cashew nuts, coconuts, cotton, kenaf, kapok, pyrethrum sisal, sugar cane, tea and tobacco.

Hassan, M. V., and V. N. M. Rao. (Central Cashewnut Res. Sta., Mangalore, India.)
Studies on the transplantation of seedlings of cashew

(Anacardium occidentale Linn). Indian Jour. Agric. Sci. 27(2):177-184. 1957.
Seedlings 1 month old and 10 months or more could be successfully transplanted at any time of year if cut back to 1/3 or 1/2 height and given shade and water. The degree of success was low at the ages of 3-8 months.

Hernandex-Medina, E.
The cashew--a promising support for vanilla. Spanish summary 101.
J. Agric. Univ. Puerto Rico, 1945, 29:30-4, bibl. 2, illus. received 1948.
Two years after transplanting from pots to the open, seedlings of cashew, Anacardium occidentale, provided enough shelter and support for the satisfactory growth of vanilla.

Hill, A. W.
The search for economic plants.
Nature, 1941, 148:15-6, 42-43.
Cashew (Anacardium occidentale.)

Indian Council of Agricultural Research.
Annual Report of the Indian Council of Agricultural Research for 1948-49, Delhi, 1950, pp. 79.
Work is in progress on many fruits including classification, selection and diseases of mangoes, classification, propagation and cultivation of citrus, varieties of litchi, papaya, grapes, custard apples, and temperate fruits, apple rootstocks resistant to collar-rot and woolly aphis, banana breeding, and a survey of the soil and climatic conditions under which cashews can be grown.

De Jong, W. H.
Cultuur de djamboe monjet in de districten Gempol (res. Malang) en Modjosari (res. Soerabaja). (Cultivation of cashew nut in certain districts in Java.) Landbouw, 1935. 11:21-5.
The districts in Java in which the cashew nut (Anacardium occidentale L.) is mostly grown are mentioned, and the soils briefly described. The total number of trees is roughly about 55,000. The tree appears to flourish in districts with avery low rainfall (in Java). Some of the trees are very large and probably about 30 years old. Propagation is effected by seed which is shown in the rainy season, two

seeds to a hole. Adventitious trees which spring up from fallen fruits are also made use of. Of subsequent systematic upkeep there is none. Under these conditions the trees begin to bear in the third to the fifth year after sowing. Flowering begins in March and the fruit is ready for picking 4-5 months later. The fruit is gathered singly by hand. Only the nut is of commercial use, those from prematurely fallen fruits being also carefully gathered up and old. A tree of average size will carry about 400 fruits. The wood is of little value but can be used in charcoal burning. The trees are sometimes attacked by a caterpillar at the flowering season, and while in fruit suffer from birds and various small mammals.
Horticultural Abstracts. V. 6, 1936. p. 69. No. 183.

Khan, K. F.
Let's produce more cashewnuts.
Indian Fmg, 1957. 7(7):36-7.
As part of an effort to increase greatly the production of cashew nuts in India, investigations are now in progress at research stations at Mangalore (Mysore Kottarakara (Kerala) and Bapatla (Andhra Pradesh).)
At Mangalore air-layering has proved an easy way of multiplying selected trees, and plants raised in this way came into bearing in 20 months compared with the 4 years usually taken by seedlings.--Indian Coun. agric. Res.

Madhava Rao, v.n., and I. K. Sambashiv Rao.
(Central Cashewnut Res. Sta., Bangalore, India.)
Studies on the vegetative propagation of cashew (Anacardium occidentale Linn.) Approach grafting (inarching) with and without the aid of plastic film wrappers. Indian Jour. Agric. Sci. 27(3):267-275. illus. 1957.
Inarch frafting could be done most cheaply if rootstocks were wrapped in plastic film so that no watering was necessary.

Memon, O. R.
Vanamahotsava.
Bull. Indian centr. Coconut Cttee, 1953, 6:214-20, illus.
Notes are also given on planting mango, jack and cashew.
Horticultural abstracts. V.23,1953. pp. 671. no. 4592.

Morada, E. K.
Cashew culture.
Philipp. J. Agric., 1941, 12:89-103, bibl. II.
The cultivation of the cashew (Anacardium occidentale) in the Philippines is described. Propagation is mainly by seed in permanent quarters, the plants coming up fairly true to type. One or two seeds are planted in holes. 1.5-2.5 in deep, the hoels being 6-8 metres apart. Only one seedling is allowed to grow. Catch cropping with bananas (and other crops in the first year) is carried out and cover cropping is adopted rom the second year with Centrosema pubescens, Calopogonium mucunoides and indigofera endecaphylla. Weeds should be cut twice a year and used as mulch. Fertilizers appear to be generally unnecessary. Cashews should bear fruit in 3 years from planting. Good sized trees give a maximum production of from 1,000 to 1,700 fruits with 7 to 15 kg. nuts. Pests and diseases are few. Notes are given of Indian methods of processing and of the method of making cashew wine as worked out by the Plant Utilisation Division, Bureau of Plant Industry. About 500 fruits should suffice to make 20 litres of wine. There is a very alrge import of cashew kernels into the U.S.A. from India and there seems no reason why cashew growing should not prove profitable in the Philippines.
Horticultural abstracts. V. 11, 1941. pp. 340. No. 1421.

Nut crops research workers.
The cashew nut, also native to tropical America, has been grown mainly in the tropical parts of India. In common with the Brazil nut, it is limited to strictly tropical conditions. With improved methods of handling the nut kernels its ppularity in world commerce has increased greatly in recent years, although its culture has not yet spread widely through the Tropics, mainly because of difficulty in shelling. There are no important nut crops that would be considered subtropical in their adaptation. The principal nut of the world fall into two classes-tropical and hardly or semihardly.
Yearbook of agriculture-climate and man... p. 414-415.

Rao, V. N. M.
Multiply the better-yielding cashewnut.
Indian Fmg, 1956, 6(3):15-17, illus.
High-yielding cashew trees capable of producing over 200 lb. of nuts a year may be successfully propagated by air-layering with the aid of polythene. The method used at the Cashew Research Station in Mangalore is described and clearly illustrated.

Rao, V. N. M., Rao, I. K. S., and Rao, P. S.
A note on side grafting of cashew (Anacardium occidentale Linn.)
Indian J. agric. Sci., 1957 (issued 1958), 27:451-2, bibl. 3.
Side grafting was successfully accomplished by placing moist moss above and below the union and covering the whole with Alkathene 100-gauge film. Up to 70% take was obtained the best months being February to May.--Central Cashewnut Res. Stat., Mangalore.

Rao, V. N. M., I. K. S. and M. V. Hassan. (Central Cashewnut Res. Sta., Mangalore, India.)
Studies on certain aspects of germination of seeds in cashew (Anacardium occidentale Linn). Indian Jour. Agric. Sci. 27(1):25-34. 1957.
Maturity of seed and time of harvest did not influence germination. Placing the seeds 2-3 inches deep with the stalk end upwards in a slanting position with a minimum of lfeshy cotyledons exposed gave the best germination.

Rao, V. N. M., Rao, I. K. S., and Hassan, M. V.
Studies on certain aspects of germination of seeds in cashew (Anacardium occidentale Linn.).
Indian J. agric. Sci., 1957, 27:25-34, bibl. 5.
Trials conducted at the Central Cashewnut Research Station, Mangalore, during 1954-55 gave the following main results: There was no appreciable difference in the germination of seeds collected during 5 different periods in the cropping season and sown simultaneously. Seeds not fully mature showed no particular advantage over those fully mature. Sowing the seeds with the stalk end facing upwards and in a slanting position gave a high percentage of germination and should reduce attacks by birds or animals on the fleshy cotyledons. Seeds sown 2 or 3 in. deep gave the best results; sowing deeper than 3 in. was detrimental.

Rao, V. N. M., and Rao, I. K. S.
Studies on the vegetative propagation of cashew (Anacardium occidentale Linn.). Approach grafting (inarching) with and without the aid of plastic film wrappers.
Indian J. agric. Sci., 1957 (issued 1958), 27:267-75, bibl. 10, illus.
By using rootstooks potted in alkathene wrapping, the cost of inarching was reduced and the season suitable for this work was extended. Eleven-month-old seedlings, 50-60 cm. in height and with a girth of about 4.5 cm. were used as

rootstocks. Practically no watering was needed. The highest percentage success, from 40-75, was obtained between Januarry and May.--Cent. Cashewnut Res. Stat., Mangalore.

Rao, V. N. M. and M. Vazir Hassan.
(Central Cashewnut Res. Sta., Mangalore, India.)
Studies on the vegetative propagation of cashew (Anacardium occidentale Linn.) Further studies on air-layering. Indian Jour. Agric. Sci. 27(4):453-465. 1957.
Tests indicated that optimum conditions were: The use of 5-10 year-old scion parents, ringing at the node, use of indolebutyric acid (1-2 cc per l), the use of 100-gauge plastic

Sebastine, K. M.
The immigrant economic plants of India. I.
Anacardium occidentale Linn.
Proc. Indian Acad. Sci., Sect. B. 1955, 42:239-48, bibl. 20. illus.
Notes are given on the introduction of the cashew into India, its distribution, ecology, culture, varieties, products, pests and diseases.

Stephens, S. E.
Some tropical fruits. 2. The cashew nut. Qd. agric. J., 1935, 44:488-9.
The cashew, Anacardium occidentale, is a native of tropical South America, but in Queensland although there are a few vigorous trees of 20-25 years old, the nut is unknown in local markets, Two well-known allied, indigenous species are the Burdekin plum, Pleiogynium Solandri, and the tar tree, Semecarpus australiensis. The cashew is simple to grow, but dislikes being transplanted, and the seed is normally sown in the permanent site. Under favourable conditions bearing starts at about 3 years. In soil requirements it is not fastidous, but prefers sandy soils. It does best under rather drier tropical conditions, and will not tolerate frost.
H.A. V. 6, 1936, p. 68-69, No.182.

Tai, E. A., and Topper, B. F.
Transplanting cashew seedlings.
J. Jamaica agric. Soc., 1947, 51:116-18.
An experiment is reported, as a result of which it is suggested that cashew seedling--which have the reputation of

being difficult to transplant--should be cut back hard at the time of transplanting from nursery beds and lifted with an undisturbed ball of adhering soil.

Tanganyika.
Annual Report of the Department of Agriculture, 1957, Part II, Dar es Salaam, 1958, pp. 85, illus.
H. A. V.29:3, 1959. p. 573. No. 3109.
This art of the Report deals with research activities which have now been reorganized on the basis of 4 Regional Centres. It includes work on the following: Cashew: yield recording, pest control.

Tkatchenko, B.
l'Anacardier. (The cashew-nut.)
Fruits d'outre mer, 1949, 4:199-205, 241-8. 281-7, bibl, 65, illus.
A comprehensive article on the origin and botany of Anacardium occidentale, its cultivation, varieties, yield and numerous products, primary and secondary. Note the bibliography.

Turner, D. J.
Some observations on the germination and grading of cashew nuts.
E. Afr. agric. J., 1956, 22:35-9, bibl. 2.
A sample of unselected cashew nuts was separated into 5 density grades, and a study made of the relationship of density of germination behaviour and to output of kernels after roasting. Nuts of greater density germinated more quickly than nuts of lower density. Total viability was generally greater with grades of higher specific gravity. Very large nuts were all of relatively low density, and their viability and rate of germination were poor. Output of roasted kernels from grades of higher density was significantly better than from grades of lower density. The percentage of sound kernels progressively increased with increasing specific gravity.

Uttaman, P., and Koyamu, K.
Kerala can step up cashew production. Indian Fmg, 1957, 7(3):19,22.
Kerala produces 70% of the Indian cashew nut crop, but production could be increased. Various aspects of its culture are discussed and the results of two investigations are out-

lined. The first investigation showed that nuts could be harvested without loss of weight as soon as the shells become ash coloured but while the "apples" are still green, thus reducing losses through the depredations of birds, bats and squirrels. In the second investigation different forms of cashew were classified into 15 broad types falling within 3 yield categories. In a population of trees only 5.7% were classed as heavy bearers, and 18.5% as medium bearers. The remainder were poor yielders producing only light and irregularly formed nuts.--Agric. Res. Stats, Nileshwar and Pilicode.

Valdes, R. R.
El maranon. (The cashew-nut).
Rev. agric., Guatemala, 1940, 17:282-5.
In a few notes on the cashew but (taken from the Revista de Agricultura, Cuba, undated) it is mentioned that the plant is easily propagated by budding. No distince varieties exist except the two distinguished by the red or yellow colour of the swollen peduncle, but there are improved selections which can be propagated by budding and may later attain varietal rand. The fleshy part of the fruit is often palatable and used for making wine and vinegar. Medicinally the fruit is considered a specific against dysentery and pulmonary affections. Oil of anacardium mixed with sulphate of iron is used in tanning and provides a chesnut brown graining. The true fruits ("nuts") are the most valuable part, being much used in confectionery in Europe. The chemical composition of the fleshy part of the fruit is given.
Horticultural abstracts. V. 11, 1941. pp. 151, No. 591.

Agricultural Department, Travancore.
Administration report of the agricultural department, Travancore, for the year 1953-54(1954): p. 54.
The new Cashewnut Research Station was established at Kottarakara in 1952. Selection is in progress.

Aiyadurai, S. G., and Koyamu, K.
Variations in seedling trees of cashew.
South Indian Hort., 1957, 5:153-7, bibl. 1, illus.
Branching, flowering and fruiting habits found in a population of 1,000 trees.

Alfred Barton Rendle.
The classification of flowering plants.
In Anacardium occidentale (Cashew-nut), a native of tropical America, the solitary carpel forms a nut with a hard bitter-resinous pericarp containing oily edible seed; the fruit-stalk swells to form a large fleshy pear-like edible structure (fig. lee, B.).
The classification of flowering plants. 1952. p. 294.

Anonymous.
Preliminary studies on the floral biology of cashew (Anacardium occidentale Linn.).
Indian J. agric. Sci. 1957:27:277-88.
From observation made at Mangalore on 100 tagged shoots during theperiod from flowering to fruiting, information was gained on the flowering period, formation of the flowers, pollination and fruit be staminate an 4% were hermaphrodite; most of the latter appeared between 45 and 105 days after the mencement of flowering. The need for selection with respect to increased production of perfect flowers is emphasized and it is suggested that breeding for shorter style length and a lower ratio of style length to stamen length may help in securing a better fruit set by open pollination. Insects appeared to be unimportant in effecting pollination, wind being the principal pollinating agent.
Plant Breeding Abstracts. p. 826, No. 4664. 1957.

Berry, Edward W.
An Anacardium in the lower Eocene of Texas.
Jour. Washington Acad. Sci. 19(2): 37-39. 2 fig. 1929.
Describes fossil seeds as A. Kirni. (p. 38).

Bull. Dep. Agric. Jamaica 1950: No. 45: Pp. 110.
Investigations 1948-1949.
Recording work has been begun at the Irwin Agricultural Station in the hope of selecting desirable high yielding types.

Bull. Dep. Agric. Jamaica 1951: No. 47: Pp. 127.
Investigations 1949-1950.
Selection is continuing at the Irwin Agricultural Station. (cf. Plant breeding abstracts, Vol. XXI, abst. 154.)

Bull. Dep. Agric. Jamaica 1951: No. 49: Pp. 153.
Investigations 1950-1951.
Work on the selection of desirable types is in progress.

Bull. Dep. Agric. Jamaica 1952: No. 50: Pp. 122.
Investigations 1952.
Selection of cashew nut and coffee continued. Variety trials were carried out on cereals, root crops, cacao, oil pal, and several other crops.

Bull. Dep. Agric. Jamaica 1955: No. 54: Pp. 130.
Investigations 1954.
Selections were further studied with respect to flower and nut production.

Cabrera, Angel L. Sinopsis de las Anacardiaceae of Argentina. (A synipsis of the Anacardiaceae of Argentina.)
Rev. Argentina Agron. 6(2): 85-118. 11. fig.
A botanical description of the family is given followed by a paragraph on the economic values of some of the species, as follows: Anacardium occidentale (cashew nut.).

Callan, E. McC. Imp. Coll. Trop. Agric., (Trinidad, B.W.I.).
Sex ratio affected by host plant. Nature (London) 152(3849): 162-163. 1943.
Large numbers of cacao thrips are required for experimental

work in Trinidad, and they can be more readily obtained from cashew (Anacardium occidentale) than from cacao. The species of thrips occurring on cashew in undoubtedly the same as theat found on cacaq, but larger populations are as a rule encountered on the former host plant.

Gomes, P. Cajeuiros de seis meses. (Cashews at six months.) Chacaras e Quintails 70:581-582. 1944.
A distinct variety or type of cashew was observed om Amazonia. The tree is a dwarf type, flowering only a few months after planting of the seed. The trees often fruit by the time they have reached a height of 1½ meters. Yields are not large, but the var. is so precocious that it is considered worthy of further trial.

Instituto Agronômico do Leste.
Trabalhos tecnicos realizados em 1955 e programados para 1956 pelo Instituto Agronomico do Leste. (Research work carried out in 1955 and planned for 1956 by the Agronomic Institute for the East.)
Bol. tec., Bahia 1956:3: No. 1:Pp. 79.
The work referred to in the genetics section includes studies of selfing and crossing in cashew (Anacardium occidentale) and the production of varieties resistant to anthracnose; rubber crosses designed to introduce resistance to Dothidella ulei; and cacao crosses to introduce resistance to Phytophthora palmivora.
Plant breeding abstracts. V.27:1-5, 1957. pp. 451 No. 2651.

Lopage, H. S., e O. Giannotti. (Inst. Biol., Sao Raulo).
Algumas especies novas de coccideos do Brasil (Homoptera-Coccoidea). (Some new species of Brazillian Coccidae.)
Arg. Inst. Biol. (Sao Paulo). 15:299-306. 1 pl., 32 fig. 1944.
Mycedaspis juventinae, from the tunk and branches of Erythrina in the City of Sao Paulo; Melanaspis aristotelesi, on the leaves of (Anacardium occidentalis,) Alagoas. Luzulaspis Cockerell is redescr. and includes L. Saueri, taken on wild grass in S. Paulo. Eriococcus coccineus, not hitherto recorded from Brazil, was found on cacti (Mammillaria spp. and Opuntia spp.) in the City of S. Paulo, and is redescr.