

RÉFÉRENCES BIBLIOGRAPHIQUES

GÉNÉRALITÉS

- AIYAPPA (K. M.) et NANAJAPPA (P. P.). — (1958). New varieties of fruit plants in Coorg. *Mysore agri. j.*, 33, n° 3, p. 160-161.
- CADILLAT (R. M.). — (1967). Les fruits tropicaux et subtropicaux, *doc. ronéotypé I. F. A. C.* 85 p.
- CHANDLER (W. H.). — (1950). Evergreen orchards. Lea and Febiger ed. Philadelphie, ch. 10, p. 229-242.
- HILGEMAN (R. N.) et REUTHER (W.). — Evergreen tree fruits in irrigation of agriculture lands, p. 704-718.
- HUGUES (G.). — (1750). The natural history of Barbados, p. 181, Londres.
- JONKER (F. P.). — (1964). Heyerdahl's Kon Tiki and its relation to ethnobotany. *Ann. Rep. Smithsonian Inst. Wash.*, n° 4778, p. 535-550.
- LEROUX (J. F.). — (1944). Fruits tropicaux et subtropicaux d'importance secondaire. *Rev. bot. appl.*, XXIV, p. 190-199.
- LEROUX (J. F.). — (1946). Le papayer (*Carica papaya L.*) et les problèmes scientifiques que posent sa culture et son amélioration. *F. O. M.*, I (11).
- LEROUX (J. F.). — (1968). Les fruits tropicaux et subtropicaux. *P. U. F.*, coll. Que sais-je, 126 p.
- MOREAU (B.). — (1964). Mission auprès de la « fédération nacional de cafetiers » de Colombie. *I. F. A. C.*
- MORINC. — (1955). Cultivo de frutales tropicales y menores. Lima, ed. jurídica, 401 p.
- MUDERJEE (S. K.) et SINGH (R. N.). — (1964). Fruit that grow well in Delhi region. *India Hort.*, p. 21-27.
- MULLER (A. S.). — (1941). El reconocimiento de las enfermedades de las plantas cultivadas en Venezuela. *Bol. Soc. Venezuela cienc. nat.*, 7, p. 99-113.
- MUNIER (P.). — (1967). Étude pour le développement des cultures fruitières en Haute-Volta. *I. F. A. C.* Paris, fév., 63 p.
- OCHSE (J. J.) et col. — (1961). Tropical and subtropical agriculture, vol. I, Mac Millan Company (N. Y.) p. 586-695.
- OPPENHEIMER (C.). — (1947). The acclimatisation of new tropical and subtropical fruit trees in Palestine.
- PY (C.). — (1950). Notes sur l'arboriculture fruitière et les stations de recherches agricoles aux U. S. A. Hawaï, Antilles, 5 p.
- PY (C.). — La production fruitière des îles Hawaii. *F. O. M.*, 5, n° 7.
- PY (C.) et FOUCHE (A.). — (1963). Les cultures fruitières de Porto Rico. *Fruits*, 18, n° 7, p. 325-336.
- SAITO (Y.) et YAMAMOTOS. — (1965). Some studies on the cultivation of tropical horticulture crops in the warm region of Japan. *Miyazaki Uni. fac. agri. Bull.*, II (1-2), p. 206-219.
- SCHUNCHE DE GOLDFLIEM (J.). — (1934). Le *C. Papaya* au jardin d'essai de Guinée. *Presse med.*, 42, p. 387.
- TACHDJIAN (Ed.). — (1933). État actuel de nos connaissances sur le papayer. *Rev. bot. appl.*, XIII.
- VAN DEN ABELE (M.) et VANDENPUT (R.). — (1956). Les principales cultures du Congo belge. 5^e ed., p. 789-798.
- VAN DER MEULEN (D. R.). — (1967). Our subtropical fruit industry farming in S. A. august, p. 362-33-35.
- ZIMMERMANN (M. M.). — (1964). The formation of wood in forest trees. Academic Press, 562 p.
- (1965). Cultivos agrícolas de Costa Rica. Manuel de recomendaciones. *Bol. tech. minist. agri. Ganadería*, 35, p. 1-161.
- (1966). A plan for agricultural development in Hawaii. Dep. of agri., p. 57-66.

BOTANIQUE

- ARNOLD (G. H.) et BAAS BERCKING. — (1949). Notes on the stem structure of *Carica papaya L.* *Annals of the Botanic Gardens Buitenzorg*, vol. 51, p. 199-230.
- ASOLOVA (E. Z.). — (1961). — Structure anatomique de *Carica quercifolia*. *Ouch. sap. Piatigarshjpharmazevt. Int. T.*, vol. 5, p. 99-102.
- COBLEY (L. S.) An introduction to the botany of tropical crop. p. 281-285.
- CORREA (D. C.), MELLO (J.) et SPRUCE (R.). — (1869). Notes on papayaceae. *J. Linn. Soc. Bot.*, X, p. 1-15.
- FOSTER (L. T.). — (1943). Morphological and cytological studies on *Carica papaya*. *Bot. Gaz.*, 105, p. 116-126.
- GRAF ZU SOLMS (H.). — (1895). Caricaceae : in Engler A. et Prantl K. *Naturliche Pflanzen-formilien* III, 6 a, p. 94-99.
- HEILBORN (O.). — (1922). Taxonomical and cytological studies on cultivated Ecuadorian species of *Carica*. *Arkiv. for Botanik*, 17 (12), p. 1-16.
- HOFMEYR (J. D. F.). — (1949). Cytogenetics in relation to breeding problems of *Carica papaya L.* *S. Afr. J. Sci.*, vol. 45, p. 96-97.
- KRATZER (J.). — (1918). Du werwandschaftlichen benziehungen der cucurbitaceen auf greend ihrer samenentwicklung mit spezieller beruchsichtigung der Caricaceen, Passifloraceen, Aristolochiaceen und Loasaceen. *Flora*, 10, p. 275-343.
- KILMER (F. B.). — (1903). The history of the papaw. *Bull. Dep. Agri. Jamaica*, 1.
- KUMAR (L. S. S.), Abraham (A.) et Srinivasan (V. K.). — (1945). The cytology of *carica papaya L.* *Ind. J. Agr. Sci.*, 15, p. 242-253.
- MASTERS (M. T.). — (1869). Vegetable teratology. For Royal Soc. by R. Hardwick Lon.
- MELLO (J. C. de) et SPRUCES (R.). — (1869). Notes on the Papayaceae. *J. Linn. Soc. (Bot.)*, 10, p. 1-14.
- MILANO (V. A.). — (1959). Caricaceas. Plant. cultiv. Republ. Argent. *Inst. Bot. Agri.* (135), p. 3-13.
- PURI (V.). — (1951). The role of floral anatomy in the solution of morphological problems. *Bot. Rev.*, 17, p. 471-553.
- SHANTI DEVIL. — (1952). Studies in the order Parietales. III. — Vascular anatomy of the flower of *Carica papaya L.* with special reference to the structure of the gynoecium. *Proc. Indian. Acad. Sci.*, vol. 36, n° 2, sec. B, p. 59-69.
- USTERI (A.). — (1907). Studien über *Carica papaya*. *Ber. Deutsch. Bot. Gesell.*, 25, p. 485-495.

ESPÈCES

- BADILLO (V. M.). — (1966). Dos nuevas especies ecuatorianas del género *Carica*. *Rev. Fac. Agron. Maracay*, 4 (I), p. 57-64.
- BADILLO (V. M.). — (1967). Esquema de las caricaceas. *Agron. Trop. Maracay*, vol. 17, n° 4, p. 245-272.
- BADILLO (V. M.). — (1967). Inventario anotado de las Caricaceas hasta hoy tenidas como validas. *Revista de la Facultad de Agronomía Venezuela*, vol. IV, n° 2, junio, p. 48-66.
- BADILLO (V. M.). — (1967). Cinco nuevas especies ecuatorianas y Colombianas del género *Carica*. *Revista de la Facultad de Agronomía Venezuela*, vol. IV, n° 2, junio, p. 68-86.
- BADILLO (V. M.). — (1967). La descripción y sinonimia de la papaya de tierra fría (*Carica pubescens* LENNE et KOCH). *Revista de la Facultad de Agronomía*, vol. IV, n° 2, junio, p. 87-91.
- BADILLO (V. M.). — (1967). Acerca de la naturaleza híbrida de *Carica pentagona* C. *Chrysopetala* Y. C. *Fructifragans*, Frutales del Ecuador y Colombia. *Revista de la Facultad de Agronomía Venezuela*, vol. IV, n° 2, p. 92-103.
- BENSON LYMAN. — (1957). Plant classification. Boston D. C. Heath and company p. 148-149.
- CHEVALIER (Aug.). — (1943). Le *Carica monoica* DESF. variation Monoïque héréditaire du papayer commun. R. B. A., n° 2, p. 63-64.
- DE ZERPA MÍCHELETTI (D.) et RICCELLI (M.). — (1962). Description morfológica y citológica de una planta segregante de un cruce entre *Carica cauliflora* JACQ. y *Carica monoica* DESF. *Agric. Tr.*, II (4), p. 193-200.
- EVERETT (P.). — (1952). The mountain papaw, a giant herbaceous plant. *New Zealand. Jnl. Agric.*, vol. 84, p. 12.
- GARCIA-BARRIGA (H.) et HERNANDEZ CAMACHO (J.). — (1958). Dos especies nuevas de *Carica*. *Caldosia*, 8 (37), p. 135-142.
- HOROVITZ (S.) et JIMENEZ (H.). — (1967). Cruzamientos interspecíficos e intergenéricos en caricaceas y implicaciones fitotécnicas. *Agro. trop. Venezuela*, vol. 17, n° 4, p. 323-343.
- HUTCHINSON (J.). — (1959). The families of flowering plants. Vol. I : Dicotyledons arranged according to a new system based on their probable phylogeny. Ed 2, Oxford Clarendon Press.
- JIMENEZ (H.). — (1957). Injertos entre especies de *Carica*. *Agron. Trop. Venezuela*, vol. 7, n° 1, p. 33-37.
- JIMENEZ (H.). — (1958). Injertos entre especies de *Carica*. *Agronomia Tropical Venezuela*, VII (4), p. 207-215.
- JIMENEZ (H.) et HOROVITZ. — (1958). Cruzabilidad entre especies de *Carica*. *Agronomia Tropical Venezuela*, vol. VII, marzo 1958, n° 4, p. 207-215.
- LAWRENCE (G. H. M.). — (1951). Taxonomy of vascular plants N. York, Mc Millan, p. 597.
- MANNING. — (1965). Systematic Guide to flowering Plants of the World. N. York Taplinger Pub. Co., p. 80-83.
- PORTER (C. L.). — (1967). Taxonomy of flowering plants 2 ed. San Francisco W. H. Freeman and Co., p. 420.
- RICCELLI (M.). — (1963). Nota : Injertos entre especies de Caricaceae. *Agronomia Tropical revista del Centro de Investigaciones agronomicas Venezuela*, vol. XIII, n° 3, p. 157-161.
- SAWANT (A. C.). — (1957). Crossing relationships in the genus *Carica*. Evolution.
- SAWANT (A. C.). — (1958). A study of the interspecific hybrid *Carica Monoica*, *C. cauliflora*. *Proc. Amer. Soc. Hort. Sci.*, 71, p. 330-33.
- SWINOLE (C. F.). — (1947). The peruvian cooking papaya *Carica monoica* a promising new fruit and vegetable for the U. S. A. corn belt. *Proc. Amer. Soc. Hort. Sci.*, vol. 49, p. 137-138.
- WARMKE (H.), CABANILLAS (E.) et CRUZADO (H. J.). — (1954). A new interspecific hybrid in genus *Carica*. *Proc. Amer. Soc. Hort. Sci.*, 64, p. 284-288.

GÉNÉTIQUE

GÉNÉTIQUE GÉNÉRALE.

- HOFMEYR (J. D. J.). — (1936). Inheritance in the papaya progeny studies of selected parents, *Fmg. S. Afr.*, II, p. 107-9.
- HOFMEYR (J. D. J.). — (1938). Genetical studies of *Carica papaya* L. *South Africa Jnl. Sci.*, XXXV, p. 300-304.
- HOFMEYR (J. D. J.). — (1941). The genetics of *Carica papaya* L. *Chron. Bot.*, 6, p. 245-247.
- HOFMEYR (J. D. J.). — (1949). Inheritance of Dwarfness in *Carica papaya* L. (Abstract) *So. African J. Sci.*, 45, p. 96-97.
- NAKASONE (H. Y.). — (1952). Inheritance of fruiting height in Papaya (M. S. thesis, Univ. of Hawaii, 36 p.), and studies on the inheritance of fruiting height of *Carica papaya* L. *Proc. Amer. Soc. hort. Sci.*, 1955, p. 168-182.
- STOREY (W. B.). — (1953). Genetics of the papaya. *J. of Heredity*, p. 70-78.
- VAN ELDEN (H.). — (1935). Genetic and breeding aspects of the papaya (*carica*) commun II^e congr. inst. Hort. (Rome).

SEXES.

Sexe types de fleurs.

- CHADEFAUD (M.). — (1955). L'obdiplostemonie contortéenne du papayer. *Rev. générale de Botanique*, p. 340-343.
- CHATEAU (R.). — (1955). Note sur l'anatomie florale et la répartition des sexes sur les pieds du papayer commun (*Carica*

papaya L.). *Revue générale de Botanique*, n° 733, p. 136-142.

- HOFMEYR (J. D. J.). — (1941). Metaxenia in *carica papaya* L. *So. African J. Sci.*, 37, p. 130-132.
- LASSOUDIÈRE (A.). — (1968). Description des fleurs et inflorescences de *Carica papaya* L. Doc. interne I. F. A. C.
- LASSOUDIÈRE (A.). — (1968). Étude d'une population de papayers solo au point de vue fructification. Premières observations. Doc. interne I. F. A. C., 5 p. + 11 tableaux et figures.
- MERLE (P.). — (1952). Premières observations sur la fructification des papayers mâles. *Fruits*, vol. 7, n° 4, p. 178-79.
- NOZERAN (R.). — (1955). Contribution à l'étude de quelques structures florales (essai de morphologie comparée). *Ann. Sc. Nat. Bot.*, II^e série, p. 1-224.
- REBOULET (M.). — (1958). Contribution à l'étude de quelques types de fleurs du *Carica papaya* L. *Naturalia Monspeliensis*, série botanique, fasc. n° 9, p. 142-162.
- STOREY (W. R.). — (1937). The primary flower types of papaya and the fruit that develop from them. *Proc. Amer. Soc. Hort. Sci.*, 35, p. 80-82.

Variations.

- BASTOS DE MENEZES (O.). — (1953). Do sexo e sua « reversão » em *Carica papaya*. *Rev. Agri. Piracicaba*, n° 1-2, p. 1-12.
- EDMOND (J. B.). — (1930). Seasonal variation in sex expression

- of certain cucumber varieties. *Proc. Amer. Soc. Hort. Sci.*, 27, p. 329.
- HESLOP HARRISON (J.). — (1947). The experimental modification of sex expression in flowering plants. *Biol. rev.*, 32, p. 38-90.
- HOFMEYR (J. D. J.). — (1939). Sex reversal in *C. Papaya* L. *S. Afr. J. Sci.*, 36, p. 86-87.
- HOFMEYR (J. D. J.). — (1943). Sex reversal as a means of solving breeding problems of *C. Papaya* L. *S. Afr. J. Sci.*, 49, p. 228-32.
- HOROVITZ (S.), MICHELETTI DE ZEPFA (D.) et ARNAL (H.). — (1953). Frecuencias de equilibrio de las formas sexuales en poblaciones de *C. Papaya* L. *Agro. Trop. Venezuela*, 3, p. 149-174.
- IÖRNS (M. J.). — (1908). Observations on change of sex in *Carica papaya*. *Sc. (n. s.)* 28, p. 125-126.
- JAYARAM REDDY (P. A.). — (1964). Studies on papaya (*Carica papaya* L.) A comparaison of inbred and open pollinated progenies of *C. Papaya* and certain observations on seed and fruit characters. *Madras agric. j.*, 51, p. 483.
- KULKARNI (L. B.). — (1923). Sex changes in andromonoecious types of papaya. *Proc. Indian. Sci. congr.*, 10, p. 187.
- KULKARNI (L. B.). — (1915). Variation in the flowers of papaya. *Poona Agric. College Mag.*, VII, p. 102-112.
- KUMAR (V.). — (1952). Studies in *C. Papaya* L. II : Sex expression in some varieties. *Indian J. Hort.*, 9 (II), p. 20-28.
- LANGE (A. M.). — (1961). The effect of 2, 3 dichloroisobutyrate and 2, 2 dichloropropionate on the expression of *Carica Papaya* L. *Proc. Amer. Soc. Hort. Sci.*, 78, p. 218-224.
- LANGE (A. H.). — (1961). Factors affecting sex changes in the flowers of *C. papaya* L. *Proc. Amer. Soc. Hort. Sci.*, 77, p. 252-264.
- MAEKANA (T.). — (1924). On the phenomena of sex transition in *Arissaema Japonica*. *Bul. J. col. agr.*, 13, p. 217-305.
- MURNEEK (A. E.). — (1927). The physiological basis of intermittent sterility with special reference to the spider flower. *Agri. exp. sta. res. bul.*, 106, p. 1-37.
- SAYED (I. A.). — (1943). Sex variation in papaw. *Trop. agri.*, 99, p. 143.
- SPEMANTHANI (B.). — (1965). Sex expression in certain inbred selections of papaya (*C. papaya* L.) *South Indian Hort.*, 38, 868 13 (1-2).
- SINGH (R. N.), MAJUMDER (P. K.) et SHARMA (D. K.). — (1961). Sex reversal in papaya (*C. papaya* L.) *Indian Hort.*, 18, p. 148-49.
- SINGH (R. N.), MAJUMDER (P. K.) et SHARMA (D. K.). — (1963). Seasonal variation in the sex expression of papaya (*C. Papaya*). *Indian J. Agric. Sci.*, 33 (4), p. 261.
- STOREY (W. B.). — (1958). Modification of sex expression in papaya. *Hort. adv.*, 2, p. 49-60.
- TIEDJENS (V. A.). — (1928). Sex ratios in cucumber flowers as affected by different conditions of soil and light. *J. Agr. Res.*, 36, p. 721-746.

Déterminisme génétique.

- ADDINSON (G.). — (1943). Sexo en mamao (*Carica papaya* L.). *Rev. Agric. Sao Paulo*, vol. 18, p. 448-49.
- CHOURDHARI (B. L.). — (1949-1950). A study on the sex determination and change of sex in papaya (*Carica papaya*). *Nagpur Agric. College Mag.*, vol. 24, n° 3-4, p. 15-19.
- HOFMEYR (J. D. J.) et ROUX (J. C.). — (1938). Determination of sex in *Carica papaya* L. *Fmg S. Africa*, 13, p. 150.
- HOFMEYR (J. D. J.). — (1938). Genetical studies in *Carica papaya*. I. — The inheritance of sex and certain plant characteristics. II. — Sex reversal and sex forms. *Bull. Dep. Agri. For. Sci. S. Afr.*, n° 187, 64 p.
- HOFMEYR (J. D. J.). — (1939). Some suggestions on the mechanism of sex determination in *Carica papaya* L. *S. Afr. J. Sci.*, 36, p. 288-290.

- HOFMEYR (J. D. J.). — (1939). Sex, linked inheritance in *Carica papaya* L. *S. Afr. J. Sci.*, 36, p. 283-285.
- HOROVITZ (S.). — (1954). Determinación del sexo en *Carica papaya* L. Estructura hipotética de los cromosomas sexuales. *Agron. trop.*, 3, p. 229-249.
- HOROVITZ (S.). — (1955). Sex in *Carica papaya*. 14th. *Int. Hort. Cong.* 1955 report. Wageningen, vol. 2, p. 1324-1334.
- JOSHI (A. C.). — (1939). A note on the determination of sex in plaintain flowers. *J. Gent.*, 38, p. 353.
- STOREY (W. B.). — (1941). The Botany and sex relationships of the Papaya : Part. I. *Hawaii Agr. Expt. Sta. Bull.*, 87, p. 5-22.
- TAMHANE (S. N.). — (1963). Sex in *Carica papaya* L. *Bull. Bot. Soc. Coll. Sct. Nagpur*, 4 (2), p. 72-73; *Biol. A.* 46 (I), 5038.
- THAPAR (A. R.) et PANWAR (J. P.). — (1961). Some studies on sex expression and Behaviour in papaya, *Himachal Hort.*, 2 (I), p. 1-4.
- WESTERGAARD (M.). — (1958). The mechanism of sex determination in dioecious flowering plants. *Advances in Genetics*, 9, p. 217-218.

Méthodes de détermination.

- CHOUDHRI (R. S.), GARG (O. K.) et BORAH (P. C.). — (1957). Physiological changes in relation to sex in papaya (*Carica papaya*). *Phytol.*, 9, p. 137-141.
- HAMILTON (R. A.) et IZUNO (T.). — (1967). A revised concept of sex inheritance in *Carica papaya*. *Agro. trop. Maracay.*, 17 (4), p. 401-402.
- HOROVITZ (S.). — (1945). Expression sexual substances florigenas en *Carica papaya*. *Agro. trop.*, 4 p. 13-27.
- KASINATHAN (S.), RAMAKUSHNAN (S.) et SRINIVASAN (B.). — (1965). Amino acids of male and female flowers of papaya. *Cur. Sci. Bangalore*, 34 (7), p. 211.
- KUMAR (V.). — (1951). Studies in *Carica papaya* L. I. — Preliminary observations on the relation of sex to the characters of seeds. *Indian J. hort.*, 8, p. 26-33.
- REYES (T. P.). — (1925). A study of sex change in papaya and of correlation between sex and certain morphological characters of seedlings. *Phililp. Agri.*, XIV, p. 391-412.
- SINGH (R. N.), MAJUMDER (P. K.) et SHAMA (D. K.). — (1961). Sex determination in papaya I, seedling identification in nursery stage by colorimetric tests. *Hort. advance*, V, p. 63-70.
- STOREY (W. B.). — (1938). Segregations of sex types in solo papaya and their application to the selection of seed. *Amer. Soc. Hort. Sci. Proc.*, 35, p. 83-85.
- STOREY (W. B.). — (1967). Theory of the derivations of the unisexual flowers of caricaceae. *Agro. Trop. Maracay.*, 17 (4), p. 273-321.

POLYPLOIDIE.

- DE ZERPA (D. M.). — (1957). (Triploidies de *C. papaya*). *Agr. trop.*, 7 (2), p. 83-86.
- DE ZERPA Micheletti. — (1958). Tetraploidia en *C. papaya* y *Carica cauliflora*. *Agr. Trop.*, vol. VIII, 67-73.
- DE ZERPA DORA. — (1958). Tetraploidia en *Carica papaya* y *Carica cauliflora*. *Agro. Trop. Venezuela*, VIII, juill-sept., n° 2.
- HOFMEYR (J. D. J.) et VAN ELDEN (H.). — (1942). Tétraploidie in *C. papaya* L. induced by colchicine. *S. Afr. J. Sci.*, 38, p. 181-85.
- HOFMEYR (J. D. J.). — (1945). Further studies of tetraploid in *papaya* L. *Agr. J. Sci.*, 41, p. 225-30 A.
- RICCELLI (M.) et MICHELETTI DE ZERPA (D.). — Tetraploidia en *C. monoica* Desf. *Agr. trop.*, XIII, n° 1, p. 22-31.
- SINGH (R. N.). — (1953). Colchicine induced polyploidy in papaya (*Carica papaya*). *J. Sc. et culture*, 19 (I), p. 44.
- SINGH (R. N.). — (1955). Further studies in colchicine induced polyploidy in papaya (*C. papaya* L.). *Indian J. Hort.*, 12, p. 63-71.

SINGH (R. N.). — (1958). Induced polyploidy in relation to the breeding of new varieties of fruit trees with special reference to *C. papaya* L. *Indian J. Hort.*, 15 (3) (4), p. 262-266.

POLLEN.

- ABDOUL KHADER (J. B. M. M.) et MADHAVA RAO. — (1964). Pollen morphology of some cultivated fruit. *Madras Agr.*, D, 51, p. 54-56.
- ALLAN (P.). — (1958). Pollen studies and some aspects of fruit set and development in *Carica papaya* at Pietermaritzburg. Ph. D. thesis Univ. Natal.
- ALLAN (P.). — (1963). Pollinisation of papaw. Farming in S. A., p. 13 à 15.
- ALLAN (P.). — (1963). Pollen studies in *Carica papaya*. I. — Formation, development, morphology and production of pollen. *S. Afr. J. Agric. Sci.*, 6, p. 517-530. II. — Germination and storage of pollen. *S. Afr. J. Agric. Sci.*, 6, p. 613-624.
- DE CARVALHO. — (1966). (Technique de pollinisation contrôlée.) *Agronomico*, 18 (1-2), p. 9-11.
- KRISHNAMURTHIS (V. N.) et MADHAVA RAO. — (1963). Certain problems in Pollination of Fruits crops. *South Indian Horticulture*, vol. II, n° 1 et 2, p. 1 à 18.
- PRASAD (A.) et DISKHIT (A. P.). — (1963). Studies on the storage of papaya pollen grains. *J. Sci. Res. Bananas Hindu Univ.*, vol. 14, n° 1, p. 52-55.
- SINGH (S. N.). — Longevity of Papaya (*Carica papaya* L.) Pollen. *Indian Journal of Horticultural*.
- SINGH (S. N.). — Testing viability of Papaya pollen in artificial Medium. Horticultural Research institute Saharanpur U. P.
- SUGUIRA (T.). — (1927). Some observations on the Maiosis of the pollen mother cells of *C. papaya*, *Myrica rubra*, *Acuba Japonica* and *Beta Vulgaris*. *Bot. Mag.*, 41, p. 219-24.
- TRAUB (H. P.) et ROURK (G.). — (1935). Papaya pollen germination and storage. *Proc. Amer. Soc. Hort. Sci.*, 34, p. 16.
- WILSON (C. L.). — (1937). The morphology of the stamen. *Amer. J. Bot.*, 24, p. 686-699.

OVULE, GRAINE, GERMINATION.

- BERGMAN (H. T.). — (1921). Intra ovarial fruits in *Carica papaya*. *Bot. Gaz.*, 72, p. 97-101.
- CHANDRASEKARAN (S. N.) et MADHURAM (G. H.). — (1950). Half apocarp in *Carica papaya* L. *Cur. Sci.*, 19, p. 186.
- DATTA (R. M.). — (1963). Tendency of apocarpy in syncarpous ovary of *Carica papaya* L. *Sci. and cult.*, vol. 29, p. 31.
- MERLE (P.). — (1954). Note sur la viviparité chez le papayer. *Fruits*, 9 (2).
- SEN (P.). — (1946). A case of vivipary in *Carica papaya* L. *Sci. and cult.*, 12 (3), p. 153-154.
- SINGH (D.). — (1960). Studies on endosperm and development of seeds of *carica papaya* L. *Hort. adv. dec.*, IV, p. 89-96.
- SRINIVASAN et BOSE (R. B.). — (1962). Note on endogenous flowers in *C. papaya* L. Indus. sec. Indian Museum Botanical survey of Indian Calcutta 13.
- VENKATARAMANI (K. S.). — (1951). An interesting instance of viviparous germination in *C. papaya*. *J. Madras Univ.*, sect. B, 21, p. 218-219.
- VAN TIEGHEM (Ph.). — (1963). Structure de l'ovule des Cariacées et place de cette famille dans la classification. *Ann. Sc. Nat. Bot.*, 8^e série, XVII.

SÉLECTION.

- ARAUJO (J.). — (1966). Sélection de las papayas por medio de la flor. *Credito rural*, 174, p. 3-4.
- CALZADA (B. J.), BAUTISTAC et BERMUDEZ (R.). — (1967). Status

- del mejoramiento del papayo en la molina Peru. *Agric. Trop.*, 17 (4), p. 381-389.
- DAVEY (J. B.). — (1956). Guide to selection of papaws. *Banana Bull.*, vol. 19, n° 10, p. 19.
- DHALIWAL (T. S.). — (1966). Progress in breeding in Puerto Rico. *Agr. Exp. Sta. misc. Publ. Rio Pedras*, 58, 22 p.
- HAIG (J. C.). — (1946). The improvement of papaya by selection (II) *Trop. Agriculturist*, 102, p. 17-22.
- HOFMEYR (J. D.). — (1933). Papaw selection. *Fmg; Afr.*, 8, p. 157-8.
- HOFMEYR (J. D.). — (1967). Some genetic breeding aspects of *Carica papaya* L. *Agron. Trop.*, 17 (4), p. 345-351.
- NAKASONE (H. Y.). — (1967). Papaya breeding in Hawaii. *Agron. Trop.*, 17 (4), p. 391-399.
- NARASIMHAN (B.). — (1949). Influence of sex and parentage on the improvement of papaya. *Indian J. Hort.*, vol. 6, n° 1, p. 22-29.
- NEL (E. A.). — (1947). Improvement of papaws. *Fmg S. Afr.*, vol. 22, p. 455-456.
- REYNOLDS (F. J.). — (1959). Papaya improvement in Honduras. *Proc. Caribbean Reg. Amer. Soc. Hort. Sc.*, VII^e meet. p. 57.
- SEEMANTHANI (B.). — (1965). Sex expression in certain inbred selections of papaya. *Indian. J. Hort.*, 13, p. 15-19.
- SEN (P. K.). — (1939). The problems of variety and sex in papaya. *Ann. Rept. of fruit Research st. Sabour Bihar*.
- SINGH (R. N.). — (1953). Prospects of papaya breeding in India. *Indian J. Hort.*, 10, p. 32-36.
- SINGH (R. N.). — (1963). Papaya breeding. A review. *Indian J. Hort.*, 21, p. 148-154.
- TORRES (M. R.) et RIOS CASTANO (D.). — (1967). Bases para un programma de mejoramiento de papaya, *Carica papaya* en Columbia. *Agro. Trop.*, vol. 17, n° 4, p. 353-59.

VARIÉTÉS.

- AKE ASSI (L.). — (1961). Une variété nouvelle de papayer en Côte d'Ivoire. *Bull. Jard. Bot. Brux.*, 31, p. 307-309.
- AYAPPA (K. M.) et NANJAPPA (P. P.). — (1959). Coorg Honey. A new find in papaya. *Indian Hort.*, 3, p. 3.
- BURDA (J.). — (1966). In the botanic gardens of the liberic papaya gringa ripe fruit in the winter *Ziva*, 14 (4), p. 120-130.
- DAI (B. B.). — (1960). Experiments on the utilisation of *F₁* *papaya hybrida*. *Agri. Res. Pailei*, 8, p. 17-29.
- DAVEY (J. B.). — (1950). It's wise to grow papaw from local strains. *Queensl. Agri. J.*, 85 (2), p. 115-118.
- DHALIWAL (T. S.), PEREZ LOPEZ (A.) et LOPEZ GARCIA (J.). — (1966). Selectiones prometedoras de papaya para pruebas comerciales en P. Rico. *Rio Pedras Agri. Exp. Sta. Miscl. Publ.*, 57, 20 p.
- DUERNBERGER (G. W.) et SHAW (T.). — (1953). New papaya products. *Hawaii Agri. Agri. Exp. Sta. Prog. Notes*, n° 77, 3 p.
- HAMILTON (R. A.) et (W. B.) STOREY. — (1954). Inbred line 8, An improved solo papaya. *Hawaii Farm Sci.*, 2 (4), p. 7.
- HAMILTON (R. A.) et IZUNO (T.). — (1965). Line 10 A, new strain of export papaya. *Hawaii Farm. Sci.*, 14 (4), p. 1-3.
- HAWSON (M. G.) et THOMAS (D. W.). — (1968). Papaw varieties for Carnarvon, varietal observations on nine papaw varieties at Gascoyne research station. *J. Agri. Western Australia*, 9 (2), p. 85-88.
- MOLLETT (J. A.). — (1962). Hawaii's future agriculture. *Uni. Agri. Exp. Sta. Eco. Rep.*, n° 59, 48 p.
- PEYNE (L. J.). — (1967). Una visita al huerto donde hubo de crearse esta variedad criolla el papayo 'Maradol'. *Fru. Cuba*, 3 (21), p. 2-11.
- RODRIGUEZ NODALS (A.) et RICARDO CORRALES. — (1967). La fruta bomba 'Maradol'; semilleros, cultivo y atenciones. *Frutas. Cuba*, 19, p. 23-25.
- SINGH DHALIWAL (T. A.) PEREZ LOPEZ et LOPEZ GARCIA (J.). — (1963). Performance of the solo papaya (*Carica papaya* L.) in P. Rico *J. Agri. Univ. P. Rico*, 47 (4), p. 246-251.

CONDITIONS CLIMATIQUES

- AWADA (M.). — (1949). Effects of day length and temperature on sex expression of papaya (*Carica papaya* L.). Master's thesis, Univ. of Hawaii, 33 p.
- AWADA (M.) et IKEDA (W.). — (1953). Effects of moisture on yield and sex expression of the papaya plants (*Carica papaya* L.). *Hawaii agric. exp. sta. Prog. notes*, n° 97, 4 p.
- AWADA (M.) et WARREN (S.), IKEDA (W.). — (1957). Effects of water and nitrogen application on composition growth, sugars in fruits yield and sex expression of the papaya plants (*Carica papaya*). *Uni. of Hawaii. tech. bull.*, 33, 16 p.
- AWADA (M.). — (1958). Relationships of minimum temperature and growth rate with sex expression of papaya plants (*C. Papaya* L.). *Hawaii agric. exp. sta. tech. bull.*, n° 38, 6 p.
- AWADA (M.). — (1961). Soil moisture tension in relation to fruit types of papaya plants. *Hawaii farm Sc.*, 10 (2), p. 7-8.
- AWADA (M.). — (1962). Soil moisture tension in relation to growth and yield of papaya (*C. Papaya* L.). *Hawaii agric. exp. sta. Univ. tech. Bull.*, n° 49, 15 p.
- LANGE (A. H.). — (1961). The effect of temperature and photoperiod on the growth of *Carica papaya*. *Ecology*, 42 (3), p. 481-487.

CULTURE

CULTURE — MONOGRAPHIES — GÉNÉRALITÉS.

- ACUNA (J.) et DE ZAYAS (F.). — (1939). Fruta bomba papaya. *Rev. Agric. Cuba*, 23, p. 40-43.
- AGNEW (G. W. J.). — (1946). Papaw in Queensland. *Queensl. Agri. J.*, 56, 1941, p. 358; 62, p. 202; 63, 1946, p. 74.
- AGNEW (G. W. J.). — (1948). Papaw culture in Queensland. *Queensl. Agri. J.*, 66, p. 208-226.
- AGNEW (G. W. J.). — (1951). The papaw. *Queensl. Agri. J.*, 73, p. 197-211.
- AGNEW (G. W. J.). — (1968). Growing quality papaws in Queensland. *Queensl. Agri. J.*, 94 (1), p. 24-36.
- ALFONSO OLIVE (R. E.). — (1952). Observaciones sobre el cultivo y mejoramiento de la fruta Bomba. Estac. Exp. Agro. del Minist. de Agri. Cuba Bol., 67.
- ALONZO (O.) et RAUL (E.). — (1952). Observaciones sobre el cultivo y mejoramiento de la fruta bomba. Cuba Est. Exp. Agro. Bol., 67.
- APONTE (G. E.). — (1963). La siembra y cultivo de papayas. Credito rural, n° 135, p. 11.
- BEMBOWER (W.). — (1948). Papaya culture. Univ. *Hawaii Agric. Ext. circ.*, 4 p.
- BEMBOWER (W.). — (1952). Papaya culture. *Agri. Ext. Circ.*, 234, 13 p.
- BHUTIANI SHARNKAR et GOVINDAN KULTYMANEN. — (1963). Papaya. Centr. Food Tech. Inst. Mysore 41 p.
- CADILLAT (R. M.). — (1946). La papaye. F. O. M. I (II), p. 340-344.
- CANN (H. J.). — (1966). The papaw. *Agri. Gaz. N.W.S.*, 77, 6, p. 347-50.
- CHATEAU (R.). — (1950). Le papayer. *Havre colonial*, 24 (14-17), p. 42.
- CHEEMA (G. S.) et DANI (P. G.). — (1930). Papaya in Bombay. *Dept. Agr. Bull.*, p. 162.
- CHEEMA (G. S.), BHAT (S. S.) et NAIK (K. S.). — (1954). Commercial Fruits of India Mc. Millan à Co. Calcutta, p. 286.
- COLE (K.) et HAWSON (M. G.). — (1962). The papaw. A fruit for the tropics and subtropics. *J. Agri. West Austr.*, 3 (10), p. 781-784 et 787-788.
- FORBES (H. O.). — (1879). Notes on *Carica papaya* et Batam Java. *J. bot. Lond.*, 17, p. 314.
- GIACOMETTI (D. C.) et MUNDIM (L. B.). — (1953). Melhoramento do mamao (*Carica papaya*). Brasil Estado de Minas Gerais, Circ. 4.
- GAILLARD (J. P.). — (1967). Un essai de culture du papayer à Nyombé (Cameroun). *Bull. inf. Binestr. Antilles*, 48, juin, p. 7-8.
- GREENWAY (P. G.). — (1948). The papaw or papaya. *East Afr. Agr.*, 13 (4).
- HAIGH (J. C.) et FERNANDO (W. N.). — (1935). A note on the planting of papaws. *Trop. Agri.*, 85, p. 387-389.
- HARKNESS (R. W.). — (1960). Papaya growing in Florida. *Flo. Agr. Ext. Serv.*, Circ. 133 A, 1960.
- HARKNESS (R. W.). — (1967). Papaya growing in Florida. *Flo. Agri. Exp. Sta.*, Circ. S 180, 15 p.
- HAYES. — Fruit growing in India. Dhur an Sons Allahabad, p. 265.
- HEAD (W.). — (1932). The papaya or papeeta its cultivation in the United Provinces. *U. P. Deft. Agric. Bul.*, 60.
- HIGGINS (J. E.) et HOLT (Y. S.). — (1914). The papaya in Hawaii. *Hawaii Agri. Exp. Sta. Bull.*, 32, 44 p.
- HOFMEYR (J. D. J.). — (1939). The culture of the papaw. *Fmg. S. Africa*, 14, p. 325-329.
- LAWRENCE (P. P.). — (1966). Papaya growing in Florida. *Flo. Agri. Ext. Serv.*, Circ. 206.
- LOEST (F. C.) et NEL (A. E.). — (1948). The papaw and its cultivation. *Frmg. S. Afr.*, 23, n° 273, p. 789-794, 814.
- MALAN (E. F.). — Papaw in South Africa. *Dep. Agri. Tech. Serv. Bul.*, n° 375.
- MARIA (P.). — La papaya, una fruta para explotar en gran escala. La tecnica en el Monté, p. 3-4.
- MATULAC (P. M.). — (1958). The papaya plant, its culture and fertilization. *J. soil Sci. Soc. Philippines*, 10 (1), p. 23-27.
- MILAN (M. P. De). — (1965). La papaya, una fruta para explotar en gran escala. *Frutas*, 7, 76-77, p. 2, 4, 5.
- MULAT (B.). — (1964). Quelques conseils pour la culture du papyer. *Fruits*, 19 (9), p. 536-538.
- PEIXOTO (A.). — (1957). Mamao. Minist. Agri. Serv. inf. Rio de Janeiro n° 2, 15 p.
- POPE (W. T.). — (1930). Papaya culture in Hawaii; *Bul. Agri. Exp. Sta.*, p. 61.
- RICHARDS (A. V.). — (1952). Papaw (*Carica papaya*). *Trop. Agric.*, 108, p. 133-134.
- RIOLLANO (A.). — (1951). Cultivo y aprovechamiento de la papaya. EST. EXP. Agri. Univ. P. Rico Publ. Misc. 4.
- RIOLLANO (A.). — (1952). El cultivo y aprovechamiento de la papaya. *Revista de Agricultura de P. Rico*, 43, p. 147-157.
- RIOLLANO (A.). — (1958). El papayero, lucrativa explotacion. Agricola industrial la Hacienda Mars.
- RIOLLANO (A.). — (1960). Nuevas tecnicas para el cultivo de la papaya. *Rev. Agri. P. Rico*, 47 (2), p. 112-117.
- ROBINSON (T. R.). — (1935). Papaya culture (*Carica papaya*). U. S. Dep. Agri. Bur. Pl. Indust. mai 4 p.
- SHAM SINGH et DALJIT SINGH. — (1956-57). *Indian Hort.* 1 (I), p. 37.
- STAMBAUCH (S. V.). — (1945). The papaya a fruit suitable for South florida. *Flo. Sta. Dep. Agri. Bul.*, 90, 56 p.
- STOREY (W. B.). — (1939). Papaya. *Hawaii Agr. Exp. Sta. Rep.*, p. 11-12.

- STOREY (W. B.) et KAMEMOTO (H.). — (1946). Papaya. Un. Hawaii Agri. Exp. Sta. Biennal Rep., 1944-46, p. 82.
- VAN LAERD (R.). — (1965). Le papayer. Min. col., Bruxelles Tract. n° 34, 24 p.
- WAITHAKA (J. H. G.). — (1966). Papaws. F. A. O., 58726-66 W. S. 5 p.
- WALLAGE (G. B.). — (1948). The establishment and running of a papaw plantation. E. Afr. Agri. J., 13, p. 234-239.
- WOLFE (H. S.) et LYNCH (S. J.). — (1940). Papaya culture in Florida. Flo. Agri. Exp. Sta. Bul., 350.
- WOLFE (H. S.) et LYNCH (S. J.). — (1942). Papaya culture in Florida. Flo. Agri. Ext. Serv. Bul., 113.
- ZISMEG (J.). — (1952). El papayo; su explotacion agricola e industrial. Oriente Mexico, 110 p.
- (1947) Cultura de mamoeiro. Bibl. Agri. Pap. Brasileira, 48 p.
- (1961) Handbook of agriculture. Indian council of agricultural Research. New Delhi, p. 323.
- (1966) Cultivo comercial de la papaya. Fruti Cuba, 2 (12), p. 8-15.

MULTIPLICATION.

- ALLAN (P.). — (1967). Papaw research at Pietermaritzburg 2. Production from cuttings. Fr-mg. S. A., p. 15-19, 21.
- ALLAN (P.). — (1967). Papaw research at Pietermaritzburg. I. Production from seedlings. Fr-mg. S. A., 42, p. 25, 29, 31.
- ALLAN (P.). — (1964). (Papayers issus de boutures) farming in S. A.; p. 34-40.
- ASSAF (R.). — (1966). Aptitude à l'enracinement des nœuds et merithales successifs des rameaux de quelques espèces fruitières. J. d'Agro. Trop. et de Bot. ap., n° 6-7, p. 289-335.
- BEMBOWER (W.). — (1948). Selection and curing of solo papaya. seeds. Univ. Hawaii agri. ext., circ. 50, 2 p.
- CHACKO (E. K.) et SINGH (R. N.). — (1966). The effect of gibberellin acid on the germination of papaya seeds and subsequent seedling growth. Trop. Agr., 43 (4), p. 341-346.
- HANCOCK (J. D. J.). — (1940). Grafting male papaya trees. Qld Agric. J., 54, p. 337.
- LANGE (A. H.). — (1961). The effect of the sarcotesta on germination of *Carica papaya*. I. Bot. Gaz.
- RAMIREZ (O. D.). — (1961). Effects of gibberellin acid on germination of papaya (*Carica papaya* L.). J. Agri. Univ. Puerto Rico, Jul. 45 (3), p. 188-190.
- SETH (J. N.). — (1962). Effect of gibberellin acid on papaya (*C. Papaya* L.) Seed germination. Hort. Res. Inst. Saharanpur, p. 64-67.
- TRAUD (H. P.) et MARSHALL (L. C.). — (1936). Rooting of papaya cuttings. Proc. am. soc. hort. Sci., 34, p. 291.

TECHNIQUES CULTURALES.

- AGNEW (G. W. J.). — (1958). Grow early papaws with irrigation. Queensl. Agri. J., 84 (4), p. 221-223.
- DE CARVALHO (A. M.), DE SORDI (G.) et COL. — (1966). Efeito do espaçamento entre plantas sobre a produção do Mamoeiro. Brag. 25 (2) Lix-IX.
- ESTANOVE (P.). — (1965). Le diquat et paraquat en cultures fruitières tropicales. Prod. Guad., 4 (22), p. 6-13.
- GHANG (H. S.). — (1968). The mechanical behavior of papaya under static loading. M. S. Thesis Univ. of Hawaii.
- HAMILTON (R. A.). — (1954). Growth studies of papaya plants on a tropical soil with a compacted subsoil. Proc. Amer. Soc. Host. Sci., 64, p. 111-116.
- KROCHMAL (A.) et FREDERIKSEN (A. L.). — (1962). Comparaison entre le rendement de papayiers plantés au milieu et sur les bords d'un verger. Ann. Soc. Hort. Sci. Carrib. Reg. Proc., roth ann. Meet., p. 20-30.

- LANGE (A. H.). — (1961). Responses of papaya solo to mulching Proc. Amer. Soc. Fr. Hort. Sci., 77, p. 245-251.
- LANGE (A. M.). — (1961). Transplanting papaya versus seedling in place. Trop. Agr., 38 (3), p. 235-243.
- PEREGRINE (W. T. H.). — (1968). A survey of papaw debility in Tanzania. East Afr. Agri. Forest. J., 33 (4), p. 316-322.
- SEEMANTHANI (B.) et MUTHUS-WAMY (S.). — (1964). A case of premature cessation of growth in papaya. S. Indian hort., (1), p. 24-26.
- SINGH (R. N.). — (1963). The problematic papaya. World crop, 15, 3, p. 82-5.
- STAMBAUGH (B. V.). — (1960). Multiple top papaya plants. Proc. carib. reg. amer. soc. for hort. Sci., III an meeting Puerto Rico. P. 48-50.

FERTILISATION.

- DE GEUS (J. G.). — (1967). Fertilizer guide for tropical and subtropical farming. Centre d'étude de l'Azote Zurich.
- JACOB (A.) et VEXKULL (H. VON). — (1958). Fertilizer use Nutrition and manuring of tropical crops. Hannover, p. 337-340.
- KATYAL (S. L.) et CHADHO (K. L.). — (1961). Manuring fruit crop 6/Papaya. Fertiliser News, 6 (6), p. 16-19.
- KRUGER (N. S.) et MENARY (R. C.). — (1968). Mesures against high nitrate in papaws. Queensland Agr. J., 94 (4), p. 234-236.
- KRUGER (N. S.) et MENARY (R. C.). — (1968). Papaw nitrate... control measures. Ques. Fruit veget. news, 33 (12), p. 267-268.
- MUNOZ (S.) et M. KOCHER (G. F.) et VILLABOLOSE (A.). — (1966). Sintomas de deficiencias nutricionales de plantas de papayo (*Carica candamarcensis* Hook f.). Agr. Tech., 26 (3), p. 106-113.
- NAKAMURA et MATSUMURA. — (1958). Growth and yield of papaya in relation to fertilizer applications. Hawaii Agr. Exp. Sta. Progress, note 118, 12 p.
- SUGAWARA (T.). — (1965). Magnesium deficiency of cultivated plants in Amazon regions. Bull. Coll. Agr. Utsunomiya Univ., 6 (2), p. 7-12.
- THOROLD (C. A.). — (1949). Manurial experiments with papaw (*Carica papaya* L.). Trop. agric. Trin., 26, p. 129-132.
- TRIPATHI (R. D.). — (1957). Effect of N, P and K fertilizers on papaya vigour. p. 146-151.
- TRIPATHI (R. D.). — (1969). A review on papaya manuring. Annu. rep. fr. res. sta. Saharanpur, p. 124-31.

ÉLIMINATION DES ARBRES MÂLES.

- BORELLO CALLIPO (F.). — (1964). La éliminacion de arbores improductivos en el cultivo de papayos. Agri. Trop., 20 (5), p. 273-278.
- RAMIREZ (O. D.). — (1960). La éliminacion de arbores machos de papaya mediante la producion de semilla controlada. Rev. Agri. P. Rico. Ogr. Of. Dep. Agr.
- RAMIREZ (O. D.). — (1954). Metodo para eliminar las plantas masculinas de papaya en siembras comerciales. Univ. P. Rico. Est. Exp. Agri. R. P. Bul., 180, 20 p.

FRUCTIFICATION.

- BHAT (A. V.). — (1964). Studies on growth flowering and fruiting charateres of somes types of papaya (*Carica papaya* L.). Madras Agr. J., 51, p. 483.
- CONJE (A. M.). — (1961). The failure of papaya trees to bear fruits and its remedy. Agri. and Ind. life, 23, n° 7, p. 10-II, 43.

COSTA (A. S.). — (1941). Una anomalia das folhas do mamoeiro (*Carica papaya* L.) *Biologico*, 7, p. 285-286.

DE CARVALHO (A. M.). — (1964). Falta de fruitificação em mamoeiro. *Agro.*, 16 (5/6), p. 10-11.

DEDOLPH (R. R.). — (1962). Effect of benzo thiazole-2 oxyacetate on flowering and fruiting of papaw. 124 (1) p. 75-78.

GANDHI (S. R.). — (1947). Factors governing stature and fruiting habit of the papaya. *Indian J. Hort.* (5) (1-2), p. 45-50.

HAMILTON (R. A.). — (1954). A quantitative study of growth and fruiting in inbred and crossbred progenies from 2 solo Papaya strains. *Tech. Bull. Hawaii agric. exp. exp. st.* 20.

MALLIK (P. C.) et SINGH (T. S. N.). — (1952). Studies for ensuring maximum number of fruit producing population of papaya by various methods. *Proc. Bihar. Acad. Sci.*, 3, p. 25-36.

PREST (R. L.). — (1955). Unfruitfulness in papaws. *Queensland agri. J.* p. 144-148.

STOREY (W. B.). — (1954). Why papaya trees fail to fruit. Univ. Hawaii extent Circ. n° 339, p. 10.

THURSBY (S.). — (1948). The fruitful papaya. How to serve and preserve it. *Univ. Flo. Agri. Ext. Serv. Bull.*, n° 134, p. 20.

ENTOMOLOCIE — NÉMATOLOGIE — PHYTOPATHOLOGIE — VIROSES

Les références se rapportant à ces chapitres ont été données à la fin des articles correspondants.

RÉCOLTE — CONSERVATION

AKAMINE (E. K.) et ARISUMI (T.). — (1953). Control of postharvest storage decay of fruits of papaya (*Carica papaya* L.) with special reference to the effect of hot water. *Proc. Amer. Hort. Sci.*, 61, p. 270-74.

AKAMINE (E. K.). — (1958). Effects of carbon dioxide on quality and shelf life of papaya. *Hawaii agri. exp. sta. tech. prog. rep.*, n° 120, 15 p.

AKAMINE (E. K.). — (1960). Temperature effects in fresh papayas processed for shipment. *Univ. Hawaii agric. exp. sta.*, n° 122, 14 p.

AKAMINE (E. K.) et WONG (R. T. F.). — (1966). Extending the shelf life of papayas with gamma irradiation. *Hawaii farm sci.*, 15 (1), p. 4-6.

AMARO (A. A.). — (1966). Embalagens para frutas no mercado da capital de São Paulo. *Agr. S. Paulo*, 13 (17-12), p. 1-41.

ARISUMI, TORU. — (1956). Test shipments of papayas. *Hawaii Agri. Expt. Stat. Tech. Bul.*, 29, 16 p.

BUFFA (A.). — (1964). Technique de conservation dans les pays tropicaux et subtropicaux. 1^{er} cong. intern. des indust. agr. et alim. Abidjan, p. 1321-1331.

BURDICK (E. M.). — (1966). Method for treating papaya plants to recover desired constituents therefrom. United States patent Office 3-274-072 Patented Sept 20.

BURKNER (P. F.) et KINCH (D. M.). — (1967). Force deformation ratio as an index of papaya maturation. *Amer. Soc. Agr. eng. Pap.* 343-19 P et 11 (3) p. 437-440 (1968).

CHANG (H. S.). — (1968). The mechanical behavior of papaya under static loading. M. S. thesis Univ. Hawaii.

CHEN (N. F. L.). — (1964). Some chemical changes during the post-harvest ripening of papaya fruit. *Bota. Bul. Acad. sinica. Taiwan*, 5 (1), p. 89-99.

HALL (E. G.) et MILLINGTON (R. S.). — (1948). Studies on the ripening of papaws. *Dep. Agri. N. S. W. Res. Rept.*, 3.

HIYANE (J.) et HAMILTON (R. A.). — (1960). Comparaison de flavour and sweetness of papayas as from female and hermaphrodite plants. *Hawaii farm sci.*, 8 (4, 5, 8).

JONES (W. W.), GALLOWAY (A. G.) et HOLZMAN (J. J.). — (1939). The effect of high temperature sterilization on the solo papaya. *Univ. Hawaii agric. Exp. Sta.*, circ. n° 14, 8 p.

JONES (W. W.). — (1939). Humidity and papaya respiration. *Proc. Am. Soc. Hort. Sci.*, 37, p. 119.

JONES (W. W.) et KUBATA (H.). — (1940). Ripening, chemical changes, cold storage. *Plant Physiol.*, 15, p. 711.

JONES (W. W.). — (1940). Papaya respiration and chemical changes with temperature. *Plant. Phys.*, 15, p. 711.

JONES (W. W.), STOREY (W. B.), PARRIS (G. K.) et HOLDAY (F. G.). — (1941). Papaya production in the Hawaiian Islands. *Agri. Exp. Sta. Bul.*, 87, 64 p.

JONES (W. W.). — (1942). Respiration and chemical changes of the papaya fruit in relation to temperature. *Plant. Physiol.* (3), p. 481-486.

KINCH (D. M.). — (1964). The physical appearance of quality in papaya. *Amer. Soc. of Agri. eng. paper h*, 64, 002.

KROCHMAL (A.) et HENDERSON (M. R.). — (1966). Packing and air shipment of solo papaya from virgin islands to Puerto Rico. *Agri. Exp. Sta. Miscel. publ.*, 55, 8 p.

MOH (C. C.). — (1963). Radiosensibilidad de las especies de plantas tropicales : *Carica papaya*. *Turriabba* 13 (3) p. 180-181.

SHOJI (K.). — (1951). Storage studies of vapor heat and ethylene-dibromide-treated papaya. *Univ. Hawaii agric. exp. sta. prog. Notes* n° 67, 5 p.

SHOJI (K.), ARISUMI (T.) et AKAMINE (E. K.). — (1956). Papaya storage decay can be controlled. *Hawaii farm sci.* 4 (3), p. 3-5.

WANG (J. K.). — Development of equipment for papaya harvesting. VIIth Inter. cong. of agri eng. sect. 3 topic, 5, 11 p. *Agri. exp. St. J.*, n° 1068.

Post harvest physiology. Papaws 14. Food Preserv. Res. B; 1960-1965. Queens. Dep. of primary Indust.

X. — (1964). Standards for Hawaii grown papayas. Dep. agr. march. Econo. Hawaii.

PRODUCTION

AILAN (P.). — (1960). Papaw season can be extended artificially ? *Fmg. S. Afr.*, 35 (12), p. 6-13.

KEELER (J. T.) et Col. — (1960). Economic factors affecting the

production of papaya in Waimanalo, Oahu. *Agri. Econo. Rep. Hawaii Exp. Sta.*, 49, p. 1-24.

KROCHMAL (A.), BOND (R. M.) et FREDERIKSEN (A. L.). — (1963).

- Papaya production in American Virgin Islands. *Caribbean Agric.*, 1, 2, p. 67-73.
 MANTILLA (G. P.). — (1967). Les exportations de l'Équateur ; réalisations et prospectives. Une interview. Forum du commerce international, 3 (3), p. 4-9.

- TRAUB (H. P.) et col. — (1942). Papaya production in the United States. U. S. Dep. Agri. Circ. 633.
 — (1964). Quelques idées pour la production de la papaye dans la Caraïbe. *Caribbean Agric.*, 2 (3), p. 665-667.

COMPOSITION. PROPRIÉTÉS

- ASENJO (C. F.) et GOYOCO (J. A.). — (1943). Oil soap, 20, p. 217.
 BADAMI. — (1967). The component acids of *carica papaya* (Caricaceae) seed oil. *J. of sc. of food and agri.*, 18 (8), p. 360-361.
 BRACCO (V.), WURHMAN (J. J.) et EGLI (R. H.). — (1967). Lipid fraction from various plants. *Rev. Fr. corps gras*, 14 (12), p. 707-712.
 CHAVEZ (J. F.) et JAFFE (W. G.). — (1964). La importancia nutricional de las frutas en la dieta venezolana. *Proc. carib. reg. amer. soc. hort. sc.*, p. 254-8.
 CIVETTA (A.), GAITAN (F.) et MILLER (C. J.). — (1965). Algunos cambios físicos y químicos de la papaya durante su almacenamiento y maduración. *Rev. Inst. Tech. Bogata*, 7 (37), p. 53-45.
 DE MOSQUEDA (M. B.) et CZYHRINCIW (N.). — Principales propiedades físicas de algunas frutas tropicales. Dep. Technol. Alim. Fac. Arch. Venezolanos de Nutrición, p. 92-96.
 EHEART (J. F.) et MASON (B. S.). — (1967). Sugar and acid in the edible portion of fruits. *Amer. Diet. Ass. J.*, 50 (2), p. 130-132.
 ECKEY (E. W.). — (1954). Vegetable fats and oils. Reinhold New York, p. 697.
 GOVENDACHARI (T. R.), PAL (B. R.) et NARASINHAM (N. S.). — (1954). Pseudocarpine a new alkaloid from *Carica papaya*. *J. Chem. Soc.*, 2, p. 1847-49.
 GURU VENKATESH (A. S.) et col. — (1960). Minor oils papaya seed. *Food sci. Mysore*, 9 (2), p. 49.
 INCHES (H.). — (1957). La papaya el mejor alimento del mundo. *Agri. Trop. Colombie*, 13 (12), p. 761-764.
 KATAGUE (D. B.) et KIRCH (E. R.). — (1965). Chromatographic analysis of the volatile components of papaya fruits. *J. Pharm. Sci.*, 54 (6), p. 891-894.
 KIRTIKAR (K. R.) et BASU (B. D.). — (1935). Indian medical plants. Allahabad : Labit Mohan Basu II p. 1097.
 LOESECKE (H. W.) VAN et NOLTE (A. J.). — (1937). (Huile de papaye. *J. Am. Chem. Soc.*, 59, p. 2565.
 LYNCH (S. J.) et FIFIELD (W. M.). — (1940). (Constituents and flavor in papaya). *Proc. Fla. Sta. Hort. Soc.*, 53, p. 181.
 MARQUEZ (V. M.) et BAUMRUCKER (J.). — Communication previa sobre el contenido de ácido ascórbico presente en las Hojas de algunas plantas tropicales cuyos frutos son ricos en vitamina C. *Dacortina* Merck Cacara.

- MILLER (C. D.) et ROBBINS (R. C.). — (1937). The nutritive value of papaya. *Biochem. J.*, 31 (1).
 ORR (K. J.) et col. — (1953). The sugar and ascorbic acid content of papaya in relation to fruit quality. *Foot res.*, 18 (5), p. 532-37.
 PANSE (T. B.) et PARANJPE (A. S.). — (1943). Carpasemine isolated from *Carica papaya* seeds. *Proc. Indian Acad. Sci.*, 18, p. 140.
 RICCARDI (A.). — (1967). El valor nutritivo de las frutas cubanas 2, El valor nutritivo de la fruta bomba. *Fr. Cub.*, 23, p. 54-57.
 SADANA (J. C.) et AHMAD BASHIR. — (1949). *J. Sci. Industr. Res.*, 8 B p. 35.
 SEELKOPK (C.) et UCZATEGUI (A.). — (1959). Influence of climate on vitamine C and sugar content in the papaya. *Rev. Fac. Far. Univ. Andes*, n° 1, p. 23-34.
 SHIEGEYAMA (T.) et MURAKAMI. — (1965). On the quality of papaw fruit and the utilization of unripe fruit in warm regions of japan. *Bull. Fac. Agri. Miyazaki* (10), p. 295-300.
 SIDDAPPA (G. S.) et BHATIA (B. S.). — (1956). *J. Sci. Industr. Res.*, 15 C, p. 118.
 SOLANO SALCEDO (C. A.). — (1946). *Carica papaya* : studies of the fruit. *Rev. Farm. y quím Baranguilla Colombia*, I, p. 139-145.
 SUBBARAYAN (C.) et CAMA (H. R.). — (1964). Carotenoids in *Carica papaya* (papaya fruit). *Indian J. Chem. N. Delhi*, 2 (II), p. 451-454.
 SUBRAHMANYAN (V. V. R.) et ACHAYA (K. T.). — (1957). (Huile de graines de papaye.) *J. Sci. Fd. Agri.*, 8, p. 657.
 VALENCIANO (O. A.), ESCALANTE (M. G.), IBARRA (A.) et LICEAGA (J.). — (1956). Estudio bromatológico del fruto de la *Carica papaya* L. (* Mamón *). *Ann. Bromatol.*, 8, p. 197-203.
 VELO (C. L.). — (1962). Estudio orientativo par via cromatográfica de los aminoácidos presentes en los hajos de lechosa, sanos y enfermos, efectuado en los especies *Carica papaya* y *Carica cauliniflora* III. *J. Agro. St. Venezuela*.
 YAMAMOTO (H. Y.). — (1964). Comparaison of the carotenoids in yellow and red fleshed *Carica papaya*. *Nature*, 201 (4923), p. 1049-1050.
 — (1950). The wealth of India. CSIR N. Dehli, vol. II, p. 77.

UTILISATION

- ANAND (J. C.) et JOHAR (D. S.). — (1953). *Indian Fd. Packer*, 7 (2), p. 13.
 BHUTHIANI (R. C.). — (1958). *Proj. Circ. n° 12. Cent. Fd. Technol. Res. Inst.*
 BURDICK (E. M.). — (1966). Carotenoid and phytol recovery from papaya plants. U. S. 3 248 301 10 p.
 BURDICK (E. M.). — (1966). Method for recovering chlorophylls from papaya plants. United states Patent, office 3, 274-073, 20 sept.
 DAS (D. P.) et SIDDAPPA (G. S.). — (1955). Preservation of ripe papaya pulp by canning and dehydration. *Bull. Cent. Food. techn. Res. Mysore*, 4, p. 279-281.

- DE CARVALHO (A. M.) et COL. — (1963). Adubaçao do mamoeiro, *Bragantia* 22 (10), p. 34-41.
 JA MIESON (G. S.). — (1943). Vegetable fats and oils, their chemistry, production and utilization for edible, medicinal and technical purposes Reinhold Publishing Corporation p. 150.
 KING (G. S.), SAKANASHI (H.) et SONG (E.). — (1951). *Indian Fd. Packer*, 5 (12), p. 31 (produits).
 KING (G. S.). — (1951). Rich powder from papaya food engin 23 (9) p. 147.
 LAL GIRDHARI et DAS (D. P.). — (1956). *Indian J. Hort.*, 13 (1), p. 38.
 LOUREIRO (M. C.). — (1962). Papaya seed cake in animal reeding. *Revista Ceres*, 66, p. 290-94.

- MISHRA (M.). — (1965). Use of *Carica papaya* juice in chlena making. *Indian veter. J.*, I, 2 (7), p. 531-33.
- NAYAK (N. C.), TRIPATHY (S. B.) et DAS GUPTA (P.). — (1966). Observations on the taste, flavour and consistency of the channa prepared by the use of *Carica papaya* juice and citric acid. *Indian veter. J.*, 43 (10), p. 913-916.
- NORRIS (B. E.). — Everyday cookery for Indian and Pakistan Tarapowala et Sons 3rd ed. Bombay.
- PEREIRA (C. O.). — (1966). Fruta bomba, funciones económica de los reidos de su industrialización en el logro de aceite comestible y de torta nutritiva para la alimentación del ganado. *Agro. Tech. Cuba*, 4 (3), p. 34-43.
- SEAGRAVE-SMITH (H.) et SHERMAN (G. D.). — (1954). How to avoid a 'gal' in commercially frozen papaya puree. *Hawaii Agr. Exp. Sta. Progrès*, notes n° 100.
- SIDDAPPA (G. S.) et RAJAM (S.). — (1958). *Indian Food Packer*, 12 (5), p. II.
- SIDDAPPA (G. S.) et RANGANNA (S.). — (1961). *Food Sci.*, 10, p. 29.

- STAFFORD (A. E.), CAVALETTO (C. G.) et BREKKE (J. E.). — (1966). Papaya puree processing. *Hawaii Agri. Exp. Sta. tech. pr. Rep.*, 157, 7 p.
- YAMAMOTO (H. Y.) et INOUYE (W.). — (1963). Sucrose as a gelation inhibitor of commercially frozen papaya puree. *Univ. Hawaii agric. exp. sta. tech. Progr. rep.*, n° 137, 11 p.
- (1952). Wants to make papaya drink. *Food engin.*, 24 (II), p. 190.
- (1954). Metal Box Co. of Indian. *Indian Food Packer*, 8 (8), p. II.
- (1956). Papaya-Banana nectar. *Food engin.*, 28 (5), p. 183-184.
- (1964). Premier congrès international des industries agricoles et alimentaires en zones tropicales et subtropicales. Abidjan 1964, SEDIAC, 717 p.
- (1965). Food technology in Australia. Vol 17 (II) Trop. Fruit Resear. Sta. in N. S. W.

DIVERS

- DAVEY (J. B.). — (1958). Cane windbreaks quality of papaws. *Queensl. Agri. J.*, 84 (1), p. 2-6.
- DAVEY (J. B.). — (1962). Papaw research. *Queensland agric. J.*, 88 (9), p. 513-515.
- CHIN (B. H.). — (1967). The metabolism of dithiocarbamate. *Dissert. A.* 28 (5) p. 1822-23.
- KOVOOR (A.). — (1966). Effects of some extracts of natural origin on the growth and development of plant cultivated in vitro. *Ann. Sci. Nat. Bot. Biol. Veg.*, 7 (2), p. 215-352.
- LASSOUDIÈRE (A.). — (1968). Projet de travail sur *Carica papaya*. L. Doc. interne I. F. A. C.
- MATTOS (J. R. de). — (1967). Mamão comercial sem desbasto. *Coopercota São Paulo*, 24 (210), p. 62-64.
- MORWOOD (R. B.). — (1931). *Queensland Dept. agr. and Stock ann. rept.*, p. 47.
- ROSENBERG (M. N.). — (1956). Plant physiology. Univ. Hawaii agri. exp. sta. Biennial rep. p. 57-59.

- SHIVPURU (D. N.) et DUA (K. L.). — (1963). Allergy to papaya tree. *Ann. Allerg.*, 21 (3), p. 139-144.
- SMITH (F. E. V.). — (1931). Jamaica. *Dept. agric. Ann. rept.*, p. 18.
- SMITH (F. E. V.). — (1932). Jamaica. *Dept. agric. Ann. rept.*, p. 20.
- SMITH (F. E. V.). — (1939). Jamaica. *Dept. agric. Ann. rept.*, p. 19.
- X. — (1947). Plant pathology, plant physiology entomology and vegetable crops rept. *Hawaii agric. exp. sta.*, 1944-46, p. 67-145.
- X. — (1954). Papayer. Rapport Kindia I. F. A. C, Guinée française, p. 12-14.
- X. — (1958-60). Biennial report. Hawaii agri. exp. sta. Univ. of Hawaii p. 61-64.
- X. — (1965). Annual report of the Agricultural research station Kade Univ. of Ghana being memo, 4, 55 p.
- X. — (1965). Annual report 1964-65 of the Queensland depart. of primary indust. 17 p.

PAPAINE

RÉCOLTE.

- AGNEW (G. W. J.). — (1946). Papaw latex production in Queensland. *Quensl. Agri. J.*, 63, 74-80; *Ibid.* 1951, 73, 197-211.
- BALLY (W.). — (1933). Le papayer et la papaine. *Rev. Inst. Inter. Agric. Rome*, p. 486.
- CASSIN, HAENDLER et HUET. — (1953). Note sur la papaine. Doc. int. I.F.A.C.
- CHARAVANAPAVAN (C.). — (1952). The tapping of papaya for papain. *Trop. Agriculturist*, vol. 108, n° 3, p. 189-190.
- FAZLULLAH KHAN (K.) et SEEMANTHANI (B.). — (1965). A comparative study of the papain yields of some inbred selections of papaya. *Madras Ag. J.*, 52, p. 474.
- HAENDLER (H.) et HUET (R.). — (1965). La papaine. *Fruits*, vol. 20, n° 8, p. 411-15.
- HAENDLER (L.). — (1955). La papaine. *Fruits*, vol. 10, n° 3, p. III-19.
- HOFSTEDÉ (H. W.). — (1928). Papaine. Dept. van Landbouw-Weltwreden, n° 5, 161 p.
- MC MILLAN (H. F.). — (1915). Papain. Chemist and druggist, 86, p. 133.

- PERMANNE (R. L.). — La culture du papayer en vue de la production de papaine. S. l. n. d. 13 p.
- ROBERT (J. B.). — (1884). Le papayer et la papaine. Thèse de pharmacie, Montpellier.
- SANDERS (F. R.) et ROBERTSON (J. K.). — (1964). Cultivation of papaya and production of papain. *East Afr. Agric. J.*, 9, p. 173-174.
- SEEMANTHANI (B.). — (1965). A study of the influence of fruit size on the yield of papain in certain inbred selections of papaya. *Madras Ag. J.*, 52, p. 474.
- SEEMANTHANI (B.). — (1967). A study of the influence of fruit size on the yield of papain in certain inbred selections of papaya (*Carica papaya* L.). *Indian J. of horticulture*, vol. 24, n° 3-4, p. 141-155.
- SINGH (L. B.) et TRIPATHI (R. D.). — (1957). Hort. Adv., 1, p. 95.
- SINGH (L. B.) et TRIPATHI (R. D.). — (1957). Studies in the preparation of papain II. Further observations on the selection of fruits for the first lancing. *Indian. J. Hort.*, 14 (3), p. 140-144.
- (1954). Papaine. I. F. A. C, Kindia, Rapport, Fac 10, p. 52-65.

PRODUCTION ET MARCHÉ.

- BECKERS. — (1957). The production of papain. An agricultural industry for tropical america. *Econ. Bot.*, vol. 12, n° 1, p. 62-79.
- BLANCHARD (R.). — (1942). Le papayer d'Indochine et son latex. Thèse de pharmacie, Lyon.
- CADILLAT. — (1953). La papaïne : aperçu mondial de sa production et de son marché. *Fruits*, vol. 8, n° 6, p. 311-316.
- GIORGIO (C.). — (1960). Analisi di costi di produzione della papaïna in Somalia. *Riv. Agric. Subtrop. trop.*, vol. 65, n° 4-9, p. 571-574.
- KHAN (K. F.) et SEEMANTHANI (B.). — (1965). Produce papain for profit. *Indian Hort.*, 9 (3), p. 3-5.
- KRISHNAMURTHY (G. V.). — (1960). Pilot plant investigation on papain. *Food Sci. Mysore*, vol. 9, n° 10, p. 340-41.
- KUMAR (V.). — (1952). Studies in *Carica papaya L.* 3) Economics of papaya cultivation and fruit utilisation with special reference to the production of papain. *Indian J. Hort.*, vol. 9, n° 3 p. 36-48.
- MANSFIELD (W.). — (1914). The papain of commerce. *J. Am. Pharm. Assoc.*, 3, p. 169.
- RAGAZZINI (R.). — (1960). Considerazioni sulle possibilità di produzione industriale della papaïna in Somalia. *Riv. Agric. Subtrop. trop.*, vol. 65, n° 4-6, 7-9, p. 556-570.
- SMITH (M. A.). — (1952). Papain its production and market. *Colonial plant products*, vol. II, n° 1, 1952-53.
- VELARDE TORRES (T.). — (1956). Papaïna-Proyecto para que Mexico sea productor y competidor en el mercado internacional de esta enzima. *Chapingo*, vol. 9, n° 58, p. 123-135.
- VERMA (U. P.). — (1956). *Indian Food. Packer*, 10 (2), p. 9.
- (1948). Production de papaïne au Tanganyika. *Agron. Trop.*, vol. 3-4, p. 198.
- (1950). Papain becomes important East African export. *Chem. Eng. News*, 28 (17), 1396-97.
- (1961). Production and Marketing of papain. *Pakistan Trade*, p. 3-4.
- (1962). The Scheme for investigations on papain production in Madras State. *Ann. Progr. Report*.

SÉCHAGE ET STOCKAGE DU LATEX.

- BALLS (A. K.), LINEWEAVER (H.) et SCHWIMMER (S.). — (1940). Drying of papaya latex. Stability of papain. *Ind. Eng. Chem.*, 32 (9), p. 1277-79.
- HINKEL (Jr.). — (1951). The effect of the temperature of drying papaya latex on the initial activity and stability of papain. *Ann. N. Y. Acad. Sci.*, 54 (2), p. 245-254.
- HINKEL (Jr.). — (1951). The effect of chemical treatment of papaya latex on the initial activity and stability of papain. *Ann. N. Y. Acad. Sci.*, 54 (2), p. 255-262.
- HINKEL (Jr.). — (1951). Further studies on the effect of drying conditions and of the chemical treatment of papaya latex on the stability of papain. *Ann. N. Y. Acad. Sci.*, 54 (2), p. 263-272.
- HUET (R.). — (1956). Considérations sur la température de séchage du latex de la papaye. *Fruits*, vol. II, n° 3, p. 111.
- HUET (R.). — (1956). Note sur la conservation de l'activité du latex de papaye au cours du stockage. *Fruits*, vol. II, n° 4, p. 168-170.
- KILMER (F. B.). — (1901). The story of the papaw. *Am. Pharm. J.*, 73, p. 272, 336, 386.
- PATRON (A.). — (1952). La Papaïne. Préparation, propriétés, usages. *Fruits*, vol. 7, n° 2, p. 57-61.
- TEIXEIRA (C. G.). — (1956). Extração do latex e preparo da Papaïna. *Agronomico Campinas*, 17 (11/12) p. 4-6.
- TRIPATHI (R. D.). — (1953). Effect of prevailing temperature during collection of papaya latex on the activity of its

enzyme. *Proc. nat. Acad. Sci. india*, vol. 23, n° 4-6, p. 157-162.

PRÉPARATION — PURIFICATION.

- CAYLE (T.). — (1965). Purification of papain from papaya abstracts. *Br. US 3 210257*; 3 p.
- CHARAPANAVAN (G.). — (1945). Studies on the preparation properties and essays of commercial papaw. *Trop. agric. Ceylan*.
- CHARAVANAPAVAN (C.). — (1956). Studies on the improved methods of production, storage and standardization of papain. *Trop. Agriculturist*, 62 (1), p. 45-52.
- FROSSARD (R.). — (1926). La papaïne commerciale. La purification. *Bull. Soc. Chim. Biol.*, 8, p. 288.
- LESUK (A.). — (1958). Process for the purification of papain. *Br. US n° 3 011 952*.
- OKUMURA (S.). — (1938). Chemical nature of papain II. Purification of papain by tkaamylase. *Bull. Chem. Soc. Japan*, 13, p. 534.
- PARPIA (H. A. B.) et BHUTIANI (R. C.). — (1958). *Food Sci. Circ.* n° 3, Cent. Fd. Technol. Res. Inst.
- SINGH (L. B.) et TRIPATHI (R. D.). — (1957). Studies in the preparation of papain. *Hort. Advance*, 1, p. 95-101 et 102-105.
- SINGH (L. B.) et TRIPATHI (R. D.). — (1957). Studies on the preparation of papain I. *Indian J. Hort.*, 14 (2), p. 77-82.
- SINGH (L. B.) et TRIPATHI (R. D.). — (1960). Studies in the preparation of papain V. Effect of different concentration of sodium bisulfite on the quality of the enzyme. *Hort. Adv.*, 4, p. 72-77.
- SOEJIMA (M.) et SHIMURA (K.). — (1961). Preparation of reduced, activator free papain by parathiolcresol treatment. *J. Biochem.*, 49 (5), p. 260-61.
- VAN LAERE (R.). — (1946). Extraction et préparation de la papaïne. *Bull. Agr. Congo belge*, 37 (4), p. 809-812.
- (1947). Papain extraction. *Rhôd. Agric. J.*, 44 (4), p. 244.

COMPOSITION.

- BALLS (A. K.), LINEWEAVER (H.) et THOMPSON (R. R.). — (1937). Crystallin papain. *Sciences*, 86, p. 379.
- BALLS (A. K.) et LINEWEAVER (H.). — (1939). Nature of a group in papain essential to its activity. *Nature*, 144, p. 513.
- BALLS (A. K.) et LINEWEAVER (H.). — (1939). Isolation and properties of crystalline papain. *J. Biol. Chem.*, 130, p. 669.
- BALLS (A. K.) et THOMPSON (R. R.). — (1940). Crude papain. Preparation and properties. *Ind. Eng. Chem.*, 32 (8), 1144-47.
- BEVAIN (C. W. L.) et OGAN (A. V.). — (1964). Studies on west african medicinal plants. I Biogenesis of carpaine on *Carica papaya L.* *Phytochemistry*, 3, p. 591-594.
- CAYLE (T.), SALETAN (L. T.) et LOPEZ RAMOS (B.). — (1964). Some papain fractions and their characteristics. Wallenstein lab. commun. 27, p. 87-96.
- CLOSE (J.). — (1952). Composition en acides aminés d'une papaïne cristallisée. IRSAC, 5^e rap. an., p. 197.
- COKE (J. L.) et RICE (W. Y. Jr.). — (1965). The absolute configuration of carpaine. *J. Org. Chem.*, 30 (10), 3420-3422.
- DARBY (H. H.). — (1941). — Ultraviolet absorption spectrum of papain. *J. Biol. Chem.*, 139, 72, 1.
- DRENTH (J.) et col. — (1962). The crystal structure of papain C. I. Two dimensional Fourier synthesis. *J. mol. biol.*, 5 (4), p. 397-407.
- DRENTH (J.) et col. — (1967). The crystal structure of papain. II. A three dimensional Fourier synthesis at 4-5 Å resolution. *J. mol. biol.*, 24 (3), p. 449-457.
- DRENTH (J.) et col. — (1968). Structure of papain. *N. A. T. J.*, 218 (5145), p. 929-932.

- EBATA (M.) et YASUNOBU (K. T.). — (1962). Chymopapain. I. Isolation, crystallisation and preliminary characterization. *J. biol. Chem.*, 237 (4), p. 1086-1094.
- FRATER (R.), LIGHT (A.) et SMITH (E. L.). — (1965). Chemical and enzymatic studies on the amino terminal sequence of papain. A reinvestigation. *J. biol. Chem.*, 240 (I), p. 253-257.
- GANAPATHY (C. V.) et SASTRI (B. N.). — (1938). Active group of papain. *Nature*, 142, p. 539.
- GANAPATHY (C. V.) et SASTRI (B. N.). — (1939). The nature of papain. *J. Biochem.*, 33, p. 1175.
- GLAZER (A. N.). — (1961). The sulfur distribution of papain and related studies. Dissert. Abstr. 22 (1) p. 50. (Thesis of Doctor of Philo. at the Univer. of Utah.) Dec 1960, 148 p.
- GLAZER (A. N.) et SMITH (E. L.). — (1965). The sulfur distribution of papain. *J. biol. Chem.*, 240 (I), p. 201-208.
- GRISARD (V.) et NATHAN SHARM. — (1964). N'-benzyloxycarbonyl amino acids as virtual substrats for papain. *Biochim. biophys. Acta*, 89 (1), p. 152-155.
- HUET (R.). — (1956). Nature et propriétés de la papaïne. *Fruits*, vol. II (2), p. 51-57.
- JANSSENS (E. F.) et BALLS (A. K.). — (1941). Chymopapain : a new crystalline proteinase from papaya latex. *J. Biol. Chem.*, 137, p. 459.
- KIMMEL (J. R.) et SMITH (E. L.). — (1954). Crystalline papain. I. Preparation, specificity and activation. *J. biol. Chem.*, 207 (2), p. 515-531.
- LIGHT (A.) et GREENBERG (J.). — (1965). The sequence of 26 amino acid residues at the amino terminas of papain. *J. biol. Chem.*, 240 (1), p. 258-265.
- MADHAVAKRISHNA (W.) et BOSE (S. M.). — (1960). Amino acid composition N⁻ and C⁻ terminal amino acids of crystalline calopapain and papain. *Enzymologia*, 22, p. 251-261.
- MC DOWALL (M. A.) et SMITH (E. L.). — (1965). Dilute acid hydrolysis of papain. *J. biol. ch.*, 240 (1), p. 281-289.
- MORINARA (K.), MONNA (K.) et AKABORI (S.). — (1965). A new model of the active site of papain. *Proc. jap. acad.*, 41 (9), p. 828-830.
- MYERS (L. S.) et ABERNETHY (J. L.). — (1964). The radiation chemistry of papain in dilute aqueous solution. *Radiation Res.*, 22 (2), p. 334-344.
- PECKOLT (R.). — (1879). *Carica papaya* and papaya and papayotin. *Pharm. J.*, 10, p. 343.
- PEREZ VILLASENR (J.). — (1967). Chemical modification of the active site of papain. Diss. Abstr., B, 28 (4), p. 1348.
- SANNER (T.) et PIHL (A.). — (1963). Studies on the active SH group of papain and on the mechanism of papain activation by thiols. *J. biol. Chem. USA*, 238 (1), p. 165-171.
- SCHECHTER (I.) et BERGER (A.). — (1967). On the size of the active site in proteases. I. — Papain. B; b. Res. Comm. 27 (2) p. 157-162.
- SKELTON (G. S.). — (1963). Papain and chymopapain : comparative activation studies. *Enzymologia*, 25 (3), p. 201-206.
- SMITH (E. L.), KIMMEL (J. R.) et BROWN (D. M.). — (1954). Crystalline papain II. — Physical studies ; the mercury complex. *J. Biol. Chem.*, 207 (2), p. 533-549.
- SMITH (E. L.), STOCKELL (A.) et KIMMEL (J. R.). — (1964). Crystalline papain III. — Aminoacids composition. *J. biol. chem.*, 207 (2), p. 551-561.
- SMITH (E. L.). — (1958). Active site of papain and covalent + High Energy + bonds of proteins. *J. biol. Chem.*, 233 (6), p. 1392-1397.
- THOMPSON (E. O. P.). — (1954). Crystalline papain IV. Free amino groups and N terminal sequence. *J. biol. Chem.*, 207 (2), p. 563-574.
- PROPRIÉTÉS GÉNÉRALES.
- BALLS (A. K.) et HOOVER (S. R.). — (1937). The milk clotting action of papain. *J. biol. Chem.*, vol. 121, p. 735-745.
- BALLS (A. K.), LINEWEAVER (H.) et SCHWIMMER (S.). — (1941). Papain U. S. Patent 2, 257-218.
- BALLS (A. K.). — (1940). Report on enzymes. *J. Assoc. Offic. Agr. Chemists*, 23, p. 446.
- CHANDRASEKHAR (N.), VAIDYANATHAN (C. S.) et SIRSI (M.). — (1961). *J. Sci. Industr. Res.*, 200, p. 213.
- CLOSE (J.). — (1952). Étude des enzymes de la papayotin. Thèse Fac. des sc. Uni. Liège, ISRAC, 5^e rap. an., p. 195.
- HARLAY (V.). — (1900). Remarques relatives à l'action de la chaleur sur la papaïne. *J. Pharm. Cem.*, II, p. 268.
- HUET (R.). — (1956). Nature et propriétés de la papaïne. *Fruits*, vol. II, p. 51-57.
- HWANG (K.) et IVY (A. C.). — (1951). A review of literature on the potentiel Therapeutic Significance of papain. *An. New York Aca. Sc.*, 54 (2), p. 161-207, 338 ref.
- JACOBI (A.). — (1886). Note on papayotin. *Therap. Gaz.*, 2, p. 145.
- JOHNSTON (R. N.C.). — (1890). Notes on the use of papain in ear diseases. *Edinburg med J.*, 35, p. 62, 1.
- KIMMEL (J. R.) et SMITH (E. L.). — (1957). The properties of papain. *Adv. Enzymol.*, 19, p. 267-334.
- KRAUT (H.) et BAUER (E.). — (1927). Zur kenntnis de papains. *Z. Physiol. Chem.*, 164, 10.
- LINEWEAVER (H.) et SCHWIMMER (S.). — (1941). Some properties of crystalline papaine Stability toward heat, pH, urea; pH optimum with casein as substrate. *Enzymologia*, 10, p. 81.
- MATHESON (J. K.). — (1950). Papain. *East Afr. Agr. J.*, p. 145-150.
- MATSUYAMA (Y.), SHIMURA (K.) et YAMASHITA (A.). — (1950). Peptide formation by papain. Symposia on enzyme chem. (Japan) 5, p. 96-97.
- MESSER (M.) et OTTESEN (M.). — (1964). Isolation and properties of glutamine cyclotransferase of dried papaya latex. *Bioch. Biophys. Acta*, 92 (2), p. 409-411.
- MISHRA (M.). — (1965). Milk coagulant principle in *Carica papaya*. *Ind. Vet. J.*, 42 (2), p. 134-135.
- MODDER (E. E.). — (1887-8). On the medical uses of *C. papaya* L. The ceylon M. J. Feb. p. 115.
- OLUMURA (S.). — (1939). Chemical nature of papain. III. — Action of hydrocyanic acid on papain. *Bull. Chem. Soc. Japan*, 14, p. 161.
- PEREIRA SANTOS (P. O.). — (1953). A papaina. Agros. Lisbonne, p. 93-103.
- PILLAT (M. C.). — (1965). A blood anticoagulant factor from the latex of *Carica papaya*. I. — Purification and general properties II. — Its nature of action on blood coagulation. *Proc. Indian Ac. Sci.*, 42 (6), p. 316-324 et 43 (1), p. 46-54.
- RAMAKRISHNAN (T.), PILLAI (N. C.) et GIRI (K. V.). — (1952). *Curr. Sci.*, 21, p. 251.
- SHACK (P.). — (1967). Fractionation of proteolytic enzymes of dried papaya latex. Isolation and preliminary characterization of a new proteolytic enzyme. C. R. Tra. Lab. Carlsberg 36 (4) p. 67-83.
- TANTER et col. — (1951). Papain. *Annals of New York Acad. of Sci.*, 54 (2), p. 143-296.
- YU KUN SUN et CH'ENG LU CHOU. — (1961). Papain. I. — comparative study on the hydrolysis of different synthetic substrats. II. Histidine and tryptophan residues as essentiel groups. *Sheng Wu Hua Hsueh*, I (2), p. 115-123.

ACTIVITÉ PROTÉOLYTIQUE.

- AARON ARNOLD, SCHMITZ (J. R.) et BLUMBERG (H.). — (1951). Demonstration of the in vivo activity of papain. *Ann. N. Y. Aca. Sc.*, 54 (2), p. 273-276.
- ASENJO (C. F.) et al. — (1943). Protéolytic activity byposition and age of papaya trees. *J. Agric. Univ. of Puerto Rico*, 27, 1.

- ATREYA (B. D.). — (1963). Investigation of physical and chemical factors influencing the enzymic properties of papain. *Agro. Univ. J. Res. Sc.*, 12 (1), p. 333-337.
- DESIKACHAR (N.). — (1931). Studies in enzyme action V. Thermostability of papain. *Proc. Indian Sci. Congr.*, 18^a, p. 179.
- DESREUX (V.) et FISCHER (P.). — (1947). Mécanisme de l'inactivation de la papaine par certains gaz de combat. *Activité Biolog.*, 17, p. 127-140.
- ENDERS (C.), SAJI (T.) et HARTONG (B. D.). — (1939). Zur bestimmung des Bierstabilität II. *Wochschr. Brau.*, 56, p. 329.
- GAWRON (O.) et CHESLOCK (K. E.). — (1951). The activation of papain by arylamides of mercaptoacetic acid. *Arch. biochem. biophys.*, 34, p. 38-49.
- GERBER (C.). — (1909). Relations entre ferment presurants et les ferment protéolytiques végétaux; leur rôle dans la plante. *C. R. Soc. Biol.*, 67, p. 332.
- GERBER (C.). — (1909). La prêture du papayer I. — Son action sur le lait bouilli, aux diverses températures. II. — Action des divers agents chimiques sur la caséification du lait par la papayotine. *Soc. Biol.*, 66, p. 227-366.
- HINKEL (Jr.) et AARON ARNOLD. — (1951). The effect of the activity state of the enzymes on the in vivo activity of papain. *Ann. N. Y. Acad. Sci.*, 54 (2), p. 277-281.
- HELLERMAN (L.) et PERKINS (M. E.). — (1934). Activation of enzymes. II. — Papain activity as influenced by oxidation reduction and by the action of metal compounds. *Biol. Chem.*, 107-241.
- HOOVER (S. R.) et KOKES (E. L. C.). — (1947). Effect of the pH upon proteolysis by papain. *J. Biol. Chem.*, 167-190.
- KYOICHI Ozawa et col. — (1962). Activation and inhibition of papain. *J. Biochem. Tokyo*, 51, p. 372-74.
- MENDEL (L. B.) et BLOOD (A. F.). — (1950). Some peculiarities of the proteolytic activity of papain. *J. Biol. Chem.*, 8, p. 177.
- OKUDA (H.). — (1937). Activation of proteinase I. — The effect of ascorbic acid, cysteine and heavy salts on papaine activity: *Sei. i, Kai Med. J.*, 56, p. 1179.
- PANT (R.) et SRIVASTAVA (S. C.). — (1966). Proteolytic activity of some plant latex. *Curr. Sc.*, 35 (2), p. 42-43.
- RINGER (W. E.) et GUTTERINK (B. W.). — (1927). Einfluss der reaktion auf die Eiweiss verdauende kraft des papains. *Z. Phys. Chem.*, 1926, p. 256-275. 1927, p. 164-112.
- SAWJALOW (W. W.). — (1931). Zur theorie des Eiweissverdaung. *Arch. Ges. Physiol. (Pflügers)* 85, p. 171.
- SCOTT (E. M.) et SANSTROM (W. M.). — (1942). The activation of papain. *Arch. Biochem.*, I, p. 103.
- SLYVTERMAN (L. A.). — (1967). The activation reaction of papain. *Biochim. Biophys. acta*, 139 (2), p. 430-438.
- TSIPEROVITCH (A. S.). — (1948). Activation and suppression of plastain formation by chemical action on an enzyme (papain). *Ukrain Biokhim Zhur*, 20, p. 213-219.
- WEIR (C. E.), WANG (H.), BIRKNER (M. L.), PARSONS (J.) et GINGER (B.). — (1958). Studies on enzymatic tenderization of meat (II et III). *Food Res.*, 23 (5), p. 411-422, 423-438.
- WINNICK (T.), CONE (W. H.) et GREENBERG (D. M.). — (1944). Experiments on the activation of ficin. *J. Biol. Chem.*, 153, p. 465.
- WURTZ (A.) et BOUCHUT (E.). — (1879). Sur le ferment digestif du *Carica papaya*. *C. R. Ac. Sci.*, 89, p. 425.
- WYZAN (H. S.), SHEPHERD (J. R.) et AARON ARNOLD. — (1965). The in vivo proteolytic activity of papain as demonstrated by nitrogen balance studies in dogs. *Ann. N. Y. Acad. Sci.*, 54 (2), p. 282-296.
- YOSHIMI OKADA et col. — (1964). Interaction of papain with anti-papain. *J. Biochim.*, 56 (2), p. 190-191.
- YOSHIOKA MASASHI. — (1949). Enzyme papain I, II. *repts inst. Chem. research Kyoto Univ.* 17, p. 59-62.
- YOSHIOKA (M.). — (1951). The action of papain IV. *Bull. inst. chem. Kyoto*, 24, p. 79-80.
- YU HORIE. — (1961). Protein clotting activity of papain. *Nippon Nogei Kagaku haishi*, 35, p. 1237-41.
- DOSAGE.**
- ANON. — (1946). Papain. The national formulary. 8th Edition Washington : American Pharmaceutical Association, p. 371.
- BALLS (A. K.) et HOOVER (S. R.). — (1937). The milk clotting action of papain. *J. biol. Chem.*, 121, p. 737-745.
- DELMOTTE PLAQUEE (J.). — (1958). Notes concernant quelques méthodes de dosages de la papaine. *J. Pharm. Belg.*, 13, p. 227-242.
- ERBING (H.) et CORCILIUS (F.). — (1951). Measurements of enzymic activity of the juice of *C. Papaya*. *Deut. Apoth Ztg* 91-93.
- HINKEL (Jr) et ALFORD (C. E.). — (1951). Studies of the methods for measuring the proteolytic activity of papain. *Ann. N. Y. Acad. Sci.*, 54 (2), p. 208-227.
- HINKEL (Jr) et ZIPPIN (C.). — (1951). Correlation of the result obtained by beef digestion, gelatin digestion and milk clotting methods of measuring the proteolytic activity of papain. *Ann. N. Y. Acad. Sci.*, 54 (2), p. 228-235.
- HOLTZHAUER (Y.). — (1961). Contribution à l'étude d'un dosage normalisé de la papaine. Thèse Doct. Pharm., Paris, 143 p.
- YIENGAR (N. K.). — (1943). Standard for papain and its preparation. *Indian J. Med. Research.*, 31-211.
- JAMMAR (M.). — (1961). L'activité protéolytique de la papaine. Méthodes d'analyse et discussion. *Bull. agric. Congo*, 52 (5), p. 931-971.
- LAGER (R. K.). — (1951). A new Method for the assay of papain. *Ann. N. Y. Acad. Sci.*, 54 (2), p. 236-244.
- LAUWERS (A.) et RUYSEN (R.). — (1963). Standardization of papain. *Kongr. Pharm. Wiss. Vortr.*, 23, p. 435-443.
- MESNARD (P.) et BABIN (R.). — (1953). Au sujet du titrage officiel de la papaine. *Bull. de la Soc. de Pharm. de Bordeaux*.
- DIVERS.**
- KASTURI BAI (A. R.) et AZMATHULLAKHAN. — (1968). Effects of the latex of *Carica papaya* and *Calotropis gigantea* on the growth of the onion root. *Current Sc.*, 37 (4), p. 110-112.
- WAHL (A. S.). — Dried milk papaya powders for beverages. Br. US, n° 2, 650, 165.

PECTINE

- BHATIA (B. S.) et col. — (1959). Preparation of pectin from raw papaya by aluminium chloride precipitation method. *Food Technol.*, 13 (10), p. 553-556 et *Food. Sci.* (8), p. 314.
- CHANG (L. W. S.) et col. — (1965). Papaya pectinesterase inhibition by sucrose. *J. Food Sci.*, 30 (2), p. 218-222.
- DAS (D. P.), SIDDAPPA (G. S.) et col. — (1954). Effect of extraction of papain on the pectin content of raw papaya. *Bull. Cent. Food Tech. Res.*, 3 (11), p. 300-301.
- JAIN (N. L.) et LAL GIRDHARI. — (1955). *Bull. Cent. Food Technol. Res. Inst.*, 4, p. 287.

- KRISNAMURTHY (C. R.) et GIRI (K. V.). — (1949). *Proc. Indian Acad. Sci.*, 29 B, p. 155 Pectine.
- KRISHNAMURTHY (C. R.). — (1950). *Proc. Indian Acad. Sci.*, 32 B, p. 59.
- SARODE (K. L.), KRISHNAMURTHY (G. V.) et SIDDAPPA (G. S.). — (1964). Studies on the preparation and stability of papaya liquid pectin. *J. Food Sci. Tech. Mysore*, 1 (1), p. 10-14.
- SAVUR (G. R.) et SREENIVASAN (A.). — (1946). *J. Sci. Industr. Res.*, 5 B, p. 41.
- SIDDAPPA (G. S.) et KRISHNAMURTHY (G. V.). — (1962). Papaya as a source of pectin of high quality. *Sump. Carbohydrates cellulose and cell. indust.* p. 34.

SIDDAPPA (G. S.) et KRISHNAMURTHY (G. V.). — (1963). Technical aspects in the preparation of pectin from papaya by the integrated proces. *Coffee tea Ind.*, 86 (8), p. 29-35.

SIDDAPPA (G. S.) et KRISHNAMURTHY (G. V.). — (1965). Extraction of pectin from papaya. *Indian J. Techn.*, 3 (8), p. 258-260.

SINGH (M. P.). — (1959). Studies in pectin production from lanched papaya fruits, effect of levels of maturity and lancing on pectin content of fruits. *Hort. Advance.*, 3, p. 102-107.

TREHAN (Y. N.) et AHMAD BASHIR. — (1947). *J. Sci. Industr. Res.*, 6 B, p. 16. Pectine.

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