

mentioned. As a supplement, "*Frutales de Clima Templado*" (Casseres (Editor), 1966. Instituto Interamericano de Ciencias Agricolas de la OEA. Turrialba, Costa Rica. 151 pp.) treats with the principles of growing fruit crops in the temperate (mountain and high plateau) regions of the tropics.

Unfortunately, no adequate single text exists for a course in tropical olericulture. In Spanish, "*Produccion de Hortalizas*" (Casseres, 1966. Instituto Interamericano de Ciencias Agricolas, Turrialba, Costa Rica. 280 pp.) is a valuable start. The book is organized around principles and practices of production, rather than around crops. Also included is useful information on origin and taxonomy of vegetable crops. This is an informative text, but of course limited to Spanish-speaking readers.

"*Vegetable Production in Southeast Asia*" (Knott and Deanon, 1967. University of the Philippines Press, College, Laguna. 406 pp.) is of particular value for its treatment of little-known vegetables of the area involved. Production systems for more familiar vegetables are also given, with special emphasis on experience gained in the Philippines and Taiwan. Introductory chapters on principles (soils, pest control) are supplemented by information on status and needs. The sections on handling, and seed production are particularly worthwhile. This is probably the best text available on tropical olericulture.

Several paperback publications may

be used to round out the course in tropical vegetable culture. "*Vegetable Gardening in the Caribbean Area*" (Winters and Miskimen, 1967. Agricultural Handbook No. 323, U. S. Government Printing Office, 114 pp.) covers most vegetable crops in a cursory fashion. Sections on practices, pests, and diseases are particularly useful and fairly up to date. "*Fruits and Vegetables in West Africa*" (FAO, 1965. Rome, Italy. 259 pp.) is of special interest because of the region involved. "*Tropical Vegetables, Vegetable Growing in the Tropics and Subtropics, Especially of Indigenous Vegetables*" (Terra, 1966. Comm. 54e, Dept. Agric. Research, Royal Tropical Institute, Amsterdam, Holland. 107 pp.) is very interesting because of its encyclopedic coverage of even minor vegetables. I have not seen a list of vegetables as extensive.

I have purposely not mentioned some older works which now need some revision. These should be part of any library on tropical agriculture, however. Not all such worthwhile old-timers are included in the list below:

Macmillan, H. F. 1935. *Tropical Planting and Gardening*. Macmillan and Co., London, 558 pp.

Nicholls, H. A., and Holland, J. H. 1940. *A Text-Book of Tropical Agriculture*. Macmillan and Co., London, 639 pp.

Ochse, J. J. 1931. *Vegetables of the Dutch East Indies*. Arch. Druk. Buitenzorg, Java. 1006 pp.

Popenoe, W. 1920 *Manual of Tropical and Subtropical Fruits*. The Macmillan Co., New York. 474 pp.

Barrett, O. W. 1928. *The Tropical Crops*. The Macmillan Co., New York.

Barrett, O. W. 1930. *Los Cultivos Tropicales*. Cultural, S. A., Havana, Cuba. 525 pp.

Many treatments of specific crops are available, but those are beyond the scope of this review.

Some excellent journals cover tropical horticultural crops. Among these are *Tropical Agriculture* (Trinidad), *Horticultural Abstracts* (East Malling), *Tropical Abstracts* (Amsterdam), and *Fruit D'Outre-Mer* (Paris). A variety of other journals, often in Spanish or Portuguese, are frequently useful.

In summary, no single text of wide applicability is available for the course in tropical horticulture. Problems of generality, incompleteness, or language limit any single publication. A library of the better books may be out of the reach of the student, but the instructor at least should have adequate literature on hand for his own reference. The preparation of a course in tropical horticulture is bound to reflect some confusion due to the immense scope of the field and the lack of a condensed text. A good one-volume text in tropical horticulture, covering both principles, practice, and fruit and vegetable crops, is sorely needed.

New Vegetable Varieties List XVII¹

Compiled by the Garden Seed Research Committee
American Seed Trade Association
and

Edited by W. C. Barnes²
Clemson University, Charleston, South Carolina

Sixteen prior lists of new vegetable varieties introduced since 1936 were published in Vols. 63, 65, 67, 69, 70, 75, 77, 82, 84, 86, 88, 90, and 92 of *Proceedings of the American Society for Horticultural Science*, and Vol. 4 No. 1 of *HortScience*.

The following abbreviations are used:
exp. desig.--experimental designation;
orig.--originated at or by;
intr.--introduced by; par.--parentage or parents; char.--outstanding characteristics; res.--resistant to; sim.--similar to or resembles; sel.--selection or selected; sl.--slight or slightly; adapt.--adapted to or adaptation.

BEAN, FIELD

ATLAS-1968-Orig. and intr. by Stokely-Van Camp, Inc. Char. small, white. Res. certain viruses in Columbia Basin. Adapt. wide.

¹Received for publication February 9, 1970.

²Truck Experiment Station.

ROYAL RED (Exp. desig. K-67 Red Kidney Bean)--1968--Orig. by USDA and Wash. State AES, Prosser. Intr. by Wash. State Crop Imp. Assoc. Par. curly top-res. type x Dark Red Kidney. Char. tall, erect bush with pods high on plant. Sim. Dark Red Kidney. Res. curly top and BV1. Adapt. Northwest, West and Mid-west.

SEAFARER (Exp. desig. 0173)--1968--Orig. by Mich. State AES, East Lansing, and USDA. Par. complex, involving X-ray mutants, Michelite, Emerson 847, Trag, and Fla. Belle. Char. early, erect, determinate plant. Sim. Seaway navy. Res. common BV, anthracnose. Adapt. Great Lakes basin.

TARA (Exp. desig. 65-4-74)--1969--Orig. by Nebr. AES, Lincoln, Par. Great Northern 1140 x Great Northern Nebraska 1-27. Char. dark green foliage, sl. more vigorous and 3-7 days later than G.N. UI 59. Sim. Great Northern #1. Res. tolerant common bacterial blight. Nebr. AES Bul. 506. 1969.

BEAN, GARDEN

BUSH BLUE LAKE 141 (Exp. desig. Code 141)--1969--Orig. and intr. by Charter Seed Co. Char. moderately erect plant with pods having many Blue Lake attributes borne high. Sim. Bush Blue Lake. Res. BV1 and N.Y. 15. Adapt. wide.

CASCADE (Exp. desig. KB-3)--1966--Orig. and intr. by Keystone Seed Co. Par. Tendercrop x 154-40. Char. dark, round 5½ in. low fiber pod, mechanical harvest. Sim. Tendercrop. Res. Common BV and N.Y. 15. Adapt. wide.

CATSKILL (Exp. desig. KB-4)--1966--Orig. and intr. by Keystone Seed Co. Char. round, smooth, light green 5 to 6 in. pods. High percent size 4 pods, mechanical harvest. Res. common BV.

CLASSIC (Exp. desig. Greenpod 150)--1970--Orig. and intr. by Rogers Bros. Co. Char. dark green, Tendercrop type bush. Slender in sieve size. Res. Curly top, BV1 and summer death (Australia). Adapt. West, Midwest, and East. U. S.

DEL REY--1969--Orig. and intr. by Northrup, King & Co. Char. Harvester type with darker pod. Sim. Harvester.

MAESTRO (Exp. desig. XP 289)--1968--Orig. and int. by Asgrow Seed Co. Char. slender, white seed, round pod, usually free from creasebacking. Sim. Slimgreen. Res. N. Y. 15. Adapt. general. Asgrow's "What's New for 1969."

MOONGOLD (Exp. desig. 2807)--1969--Orig. and intr. by Northrup, King & Co. Char. slim pod wax, medium short plant. Res. common BV.

OLYMPIA (Exp. desig. KB-2)--1966--Orig. and intr. by Keystone Seed Co. Char. medium green, small 5 to 5½ in. pods, mechanical harvest. Res. common BV. Keystone Catalog.

WONDERGREEN (Exp. desig. 64489)--1968--Orig. and intr. by Rogers Bros. Co. Par. USDA 1343 x Gallatin 50. Char. Tendercrop type bush, concentrated set, cream seeded. Sim. Tendercrop. Res. common BV, curly top. Adapt. general. Rogers Bros. Catalog 1969.

CABBAGE

GREEN BOY (Exp. desig. #63)--1968--Orig. by Sakata. Intr. by Northrup, King & Co. Hybrid. Char. mid-early, round head, medium stem, gray-green color for market or kraut. Res. tolerant yellows.

JET PAK (Exp. desig. 925)--1970--Orig. and intr. by Northrup, King & Co. Hybrid. Char. hard head, medium core, Golden Acre season. Sim. Golden Acre. Res. yellows.

RED HEAD (Exp. desig. 5587)--1969--Orig. and intr. by Keystone Seed Co. Hybrid. Char. mid-season, red, spherical heads, holds well. Sim. red market types. Keystone Catalog.

VENTURA (Exp. desig. 7933)--1969--Orig. and intr. by Keystone Seed Co. Par. selfed Copenhagen Market #53 selection. Char. spherical heads, small frame, semi-procumbent skirt leaves with slightly waved margins. Sim. Copenhagen Market. Keystone Catalog.

CANTALOUPE

PLANTERS JUMBO (Exp. desig. 67-1)--1969--Orig. by USDA. Vegetable Breeding Lab., Charleston, S. C. Char. large, well netted fruit. Sim. Hales Best Jumbo. Res. downy and powdery mildews.

CARROT

BUNNY BITE (Exp. desig. E8205)--1971--Orig. and intr. by Ferry-Morse Seed Co. Char. miniature Chantenay, excellent early developing color, excellent quality. For "baby carrot" and home garden use.

NUGGET--1968--Orig. and intr. by Keystone Seed Co. Par. European

forcing type used in parentage. Char. early, small, spherical, good color root for whole pack processing. Adapt. wide.

SPARTAN-SWEET (Exp. desig. 67S32m MSU 7707)--1969-- Orig. by Mich. State AES, East Lansing. Intr. by Crookham Co. Hybrid. Par. MSU 5931 x MSU 6000. Char. excellent interior and exterior color, free from green shoulder and core, good flavor. Res. Cercospora leafspot. Adapt. Northern mucklands.

CORN, POP

FIRESIDE--1969--Orig. by N. H. AES., Durham, N. H. Par. Tom Thumb x Strawberry. Char. early, dwarf plants, with two mahogany red or golden ears. Adapt. general.

CORN, SWEET

BUTTERSWEET (Exp. desig. 5M000)--1968--Orig. and intr. by Keystone Seed Co. Char. Hybrid. Mid-season, processing, white silk, 20 rows, tender large ears. Holds well for mechanical harvest. Adapt. processing areas. Keystone Catalog.

EARLY GOLDEN GIANT--1968--Orig. by Univ. Mass. AES, Amherst. Par. Ma CX 13 x Ma CSNT. Char. first early commercial hybrid with large ear. Sim. North Star. Res. bacterial wilt. Adapt. Northern states.

EARLY XTRA-SWEET--1970--Orig. and intr. by Ill. Foundation Seeds, Inc., Urbana. Char. hybrid, high sugar, slow starch conversion. Sim. Illini Xtra Sweet. Adapt. North and North Central U. S.

GOLDENCHIEF--1968--Orig. by Sweet Corn Genetic Service. Char. hybrid, long husk, bird resistant, excellent root system. Sim. Seneca Chief. Res. wind and bird damage.

HY-TIME--1969--Orig. and intr. by Charter Seed Co. Char. hybrid, week earlier than Golden Cross Bantam, 16 row, 7½ to 8 inch ear, yellow deep kernels, high quality, minimum tillering. Adapt. general.

SILVER BEAUTY--1968--Orig. and intr. by Sweet Corn Genetic Service. Char. unusually sweet and tender, white hybrid, good husk cover. Sim. Golden Cross but white. Adapt. general.

SUPER CHIEF (Exp. desig. Code 559)--1970--Orig. and intr. by Charter Seed Co. Char. early hybrid, attractive, high quality ear. Sim. Seneca Chief. Adapt. wide.

TRIUMPHANT (Exp. desig. SRX 207)--1969--Orig. and intr. by Niagara Chemical Div. FMC Corp. Char. main season processing hybrid, ears 16-18 rows, well filled, good husk cover, tender, excellent holding. Adapt. Mid-west and Mid-Atlantic.

ULTRASWEET (Exp. desig. 5E. YT)--1968--Orig. and Intr. by Sweet Corn Genetic Service. Char. crisp but tender, high natural flavor. Plant adapted to narrow row planting. Res. wind and bird damage.

ULTRATENDER--1968--Orig. and intr. by Sweet Corn Genetic Service. Char. processing hybrid, brilliant gold color, high cutting percentage, holds well. Res. smut, drought and wind. Adapt. main corn areas.

WONDERGOLD (Exp. desig. Exp. 6657)--1969--Orig. and intr. by Northrup, King & Co. Char. hybrid, white silk, 18 row, narrow deep kernels. Sim. NK 199.

YUKON (Exp. desig. 6618)--1969--Orig. and intr. by Northrup, King & Co. Char. hybrid, white silk, Carmel Cross season, 16 row yellow. Sim. Queen Ann.

CUCUMBER

COMANCHE--1967--Orig. and intr. by Dessert Seed Co. Hybrid. Par. Gy 54 x MSU 915. Char. medium length, dark green, blunt end fruit. Market type. Sim. Poinsett. Res. scab and mosaic. Adapt. wide.

DIXIE 23 (Exp. desig. P 23)--1970--Orig. and intr. by Ferry-Morse Seed Co. Hybrid. Par. Gy 3 x Variety sel. Char. white spine, gynoecious hybrid, medium plant vigor. Sim. Explorer. Res. tolerant powdery and downy mildews, anthracnose and angular leafspot. Adapt. Southern U. S.

GALAXY (Exp. desig. S.C. 23)--Orig. by Clemson Univ. AES, Charleston, S. C. and Asgrow Seed Co. Intr. by Asgrow Seed Co. Par. complicated, using PI 197087, 196289 and Asgrow lines. Char. white spine pickle, medium, dark green fruit with slowly developing seed and small seed cavity. L/D 2.9. Sim. Chipper and Pixie. Res. downy and powdery mildews, anthracnose, angular leafspot, CMV. Adapt. South.

SPARTAN ADVANCE (Exp. desig. MSU 6515-3)--1970--Orig. by Mich. AES, East Lansing. Intr. by Castle Seeds. Par. MSU 35G x MSU 305M. Char. gynoecious hybrid with high fruit count for mechanical harvest. Sim. Picadilly and Spartan Progress. Res. scab and CMV. Adapt. West and upper Mid-West.

EGGPLANT

POMPANO PRIDE--Orig. and intr. by Niagara Chemical Div. FMC Corp. Char. long oval fruits of uniform black purple color. Sim. Florida Market. Res. Phomopsis. Adapt. general.

LETTUCE

CHESIBB (Exp. desig. MSU 16)--1970--Orig. by Mich. State AES, East Lansing. Par. Chestnut 5-B x Bibb. Char. greenhouse type, two weeks earlier and lighter green than Bibb. Small soft head. One week earlier than Bibb on muck soil. Adapt. greenhouse and muck soil in Mid-west. Mich. AES Research Rpt. 1969.

TENDERCRISP--1969--Orig. and intr. by Keystone Seed Co. Char. Bibb type, with glossier appearance, crisp, high quality. Sim. Bibb types. Adapt. same as Bibb. Keystone Catalog.

PEAS

BONUS (Exp. desig. XP-L-14)--1968--Orig. and intr. by Asgrow Seed Co. Char. freezer in Dark Skin Perfection season, with highly doubled and tripled pods. Sim. Dark Skin Perfection. Res. race 1 Fusarium wilt. Adapt. general. Asgrow's "What's New for 1969."

HY-PAK (Exp. desig. Code 830)--1969--Orig. and intr. by Charter Seed Co. Char. hardy canner type producing medium size berries, dependable under stress. Sim. Early Perfection. Adapt. general.

MARS (Exp. desig. XP 67)--1968--Orig. and intr. by Asgrow Seed Co. Char. mid-season, medium vine, relatively large seeded freezer type. Sim. Signet but shorter vine. Res. race 1 Fusarium wilt. Adapt. wide. Asgrow's "What's New for 1969."

PUMPKIN

TRICKY JACK--1969--Orig. by N. H. AES, Durham, N. H. Intr. by Farmer Seed and Nursery. Par. Sweetnut x Cheyenne Bush. Char. early bush plant with bright orange jack O'lantern and pie fruits, naked seed. Adapt. general.

RADISH

WHITE PRINCE--1969--Orig. and intr. by Keystone Seed Co. Char. tops short, roots slowly developing, spherical, white. Adapt. wide. Keystone Catalog.

SOYBEAN, EDIBLE

KAHALA (Exp. desig. 288 BB 4-6-3-3)--1969--Orig. and intr. by Univ. Hawaii AES, Honolulu, Hawaii. Par. UD 288 and Bansei. Char. vigorous, leafy plant, pods held high. Sim. UD 288. Res. root-knot nematode. Adapt. tropical and sub-tropical. Hawaii AES Research Rpt. 178.

KAIKOO (Exp. desig. 288 BB 24-9-3-6)--1969--Orig. and intr. by Univ. Hawaii AES, Honolulu, Hawaii. Par. UD 288 and Bansei. Char. white flowered pods held high on plant. Grows on variety of soils. Sim. Bansei. Res. root-knot nematode. Adapt. tropical and sub-tropical. Hawaii AES Research Rpt. 178.

KAILUA (Exp. desig. 288 BB 4-7-1-3)--1969--Orig. and intr. by Univ. Hawaii AES, Honolulu, Hawaii. Par. UD 288 and Bansei. Char. dark green foliage, white flowers, pods easy to pick. Sim. UD 288. Res. root-knot nematode. Adapt. tropical and sub-tropical. Hawaii AES Research Rpt. 178.

MOKAPU SUMMER (Exp. desig. 288 BC 28-1-2-2)--1969--Orig. and intr. by Univ. Hawaii AES, Honolulu, Hawaii. Par. UD 288 and Bansei. Char. purple flowers, large pod and seed, good flavor. For summer harvest. Sim. Bansei. Res. root-knot nematode. Adapt. tropical and sub-tropical. Hawaii AES Research Rpt. 178.

SQUASH

PRIMA QUALITA (Exp. desig. SRX 301)--1968--Orig. and intr. by Niagara Chemical Division, F.M.C. Corp. Char. hybrid, open sturdy bush, dark green, long fruits. Sim. Zucchini. Adapt. general.

WALTHAM BUTTERNUT--1970--Orig. by Univ. Mass AES, Waltham. Par. African and N. H. Butternut. Char. greater uniformity, shape and color. Better flavor. Sim. Butternut. Adapt. wide. All America winner.

TOMATO

MINI RED CHERRY--1968--Orig. and intr. by Burgess Seed & Plant Co. Char. regular size cherry fruits on small plant. Burgess 1969 catalog.

MINI RED CURRANT--1968--Orig. and intr. by Burgess Seed & Plant Co. Char. regular currant fruits on small compact plant. Burgess catalog.

MINI RED PEAR--1968--Orig. and intr. by Burgess Seed & Plant Co. Char. regular red pear fruit on small compact plant. Burgess catalog 1960.

MINI RED PLUM—1968—Orig. and intr. by Burgess Seed & Plant Co. Char. regular red plum fruit on small compact plant. Burgess catalog 1969.

PARKER (Exp. desig. 68 B 29)—1969—Orig. and intr. by USDA, Beltsville, Md. Par. Roma x Calif. VR sel. Char. early, small vine, Italian paste type, heavy set 1.6 oz. size fruit. Sim. Harvester. Res. Verticillium and Fusarium wilts. Adapt. Eastern U. S.

SUNSET (Exp. desig. UNH 11-67)—1970—Orig. by Univ. N. H.,

Durham. Intr. by Farmer Seed & Nursery. Par. complicated. Char. productive, determinate vine with uniform ripening, large globe fruit. Moderately res. to cracking. Sim. Starfire. Adapt. North.

TROPIC (Exp. desig. 216)—1969—Orig. by Florida AES, Bradenton. Par. 479-6-1 CASTMW x 18-D2-D4-8-1. Char. trellis type, vigorous vine, fruit large, attractive and deep in polar dimension. Sim. Manalucie and Manapal. Res. race 1 Fusarium and

Verticillium wilts, gray leafspot and graywall. Adapt. Southeast. Univ. Fla. AES Cir. S-198, 1969.

WATERMELON

SUMMERFIELD (Exp. desig. 60-27)—1969—Orig. by U. S. Vegetable Breeding Lab., Charleston, S. C. Par. Fairfax x Blackstone. Char. extra large, slightly round fruit. Sim. Fla. Giant. Res. Fusarium wilt and race 1 anthracnose.

SEEDSMEN SUBMITTING VARIETIES FOR NAMING ON ASHS VEGETABLE VARIETY LIST XVII

Asgrow Seed Co. Orange, Conn. 06477
Burgess Seed and Plant Co. Galesburg, Mich. 49053
Castle Seed Farms Morgan Hill, Calif. 95037
Charter Seed Co. Twin Falls, Idaho 83301
Crookham Co. Box 520, Caldwell, Idaho 83605
Dessert Seed Co. Box 181, El Centro, Calif. 92243
Farmer Seed and Nursery Co. Faribault, Minn. 55021
Ferry-Morse Seed Co. P.O. Box 100,
Mountain View, Calif. 94040
Illinois Foundation Seeds, Inc. Box 722, Champaign, Ill. 61820
Keystone Seed Co. P.O. Box 1438
Hollister, Calif. 95023
Niagara Chemical Division, FMC Corp. P.O. Box 3091,
Modesto, Calif. 95353
Northrup, King & Co. 1500 Jackson St., N.E.,
Minneapolis, Minn. 55440
Rogers Bros. Co. P.O. Box 2188,
Idaho Falls, Idaho 83401
Sakata & Co., T. Box Kanagawa No. 11, Yokohama, Japan
Stokely-Van Camp, Inc. Spokane, Wash. 92216
Sweet Corn Genetic Service 808 East Lincoln Way,
Rt. 2, Ames, Iowa 50010
University of Hawaii AES, Bus. Ofc. Honolulu, Hawaii 62822

ALPHABETICAL INDEX OF NEW VEGETABLE VARIETIES (LIST XVII)

Variety name	Kind of vegetable	Year Introduced
Atlas	Bean, field	1968
Bush Blue Lake 141	Bean, garden	1969
Bonus	Pea	1968
Bunny Bite	Carrot	1971
Buttersweet	Corn, sweet	1968
Cascade	Bean, garden	1966
Catskill	Bean, garden	1966
Chesbibb	Lettuce	1970
Classic	Bean, garden	1970
Comanche	Cucumber	1968
Del Rey	Bean, garden	1969
Dixie 23	Cucumber	1970
Early Golden Giant	Corn, sweet	1968
Early Xtra-Sweet	Corn, sweet	1970
Fireside	Corn, pop	1969

Galaxy	Cucumber	1970
Goldenchief	Corn, sweet	1968
Green Boy	Cabbage	1968
Hy-Pak	Pea	1969
Hy-Time	Corn, sweet	1969
Jet Pak	Cabbage	1970
Kahala	Soybean, edible	1969
Kaikoo	Soybean, edible	1969
Kailua	Soybean, edible	1969
Maestro	Bean, garden	1968
Mars	Pea	1968
Mini Red Cherry	Tomato	1968
Mini Red Currant	Tomato	1968
Mini Red Pear	Tomato	1968
Mini Red Plum	Tomato	1968
Mokapu	Soybean, edible	1969
Moongold	Bean, garden	1968
Nugget	Carrot	1968
Olympia	Bean, garden	1966
Parker	Tomato	1969
Planters Jumbo	Cantaloupe	1969
Pompano Pride	Eggplant	
Prima Qualita	Squash	1968
Red Head	Cabbage	1969
Royal Red	Bean, field	1968
Seafarer	Bean, field	
Silver Beauty	Corn, sweet	1968
Spartan Advance	Cucumber	1970
Spartansweet	Carrot	1969
Summerfield	Watermelon	1969
Sunset	Tomato	1970
Super Chief	Corn, sweet	1970
Tara	Bean, field	
Tendercrisp	Lettuce	1969
Tricky Jack	Pumpkin	1969
Triumphant	Corn, sweet	1969
Tropic	Tomato	1969
Ultrasweet	Corn, sweet	1968
Ultratender	Corn, sweet	1968
Ventura	Cabbage	1969
Waltham Butternut	Squash	1970
White Prince	Radish	1969
Wondergold	Corn, sweet	1969
Wondergreen	Bean, garden	1968
Yukon	Corn, sweet	1969