

# Researchers Receive Apple Grant

GENEVA, N.Y. — Cornell University has received a three-year \$717,000 grant from an anonymous donor to bring new technologies to New York apple growers and processors.

Entomologists, plant pathologists, food scientists and horticulturists at the New York State Agricultural Experiment Station (NYSAES) in Geneva will apply their expertise to the development of new apple products and more cost-effective and environmentally friendly orchard production systems. Agricultural economists in Ithaca will evaluate market feasibility and consumer reactions to the new products.

The grant is being carried out in cooperation with New York industry. Major players include Seneca Foods in Pittsfield, Red Jacket Orchard in Geneva, Nature's Pleasures in Wolcott, and Earl's Meadery in Locke.

"We have three main objectives," said Harvey Reissig, entomologist at NYSAES, one of nine Cornell researchers listed on the grant. "The first is to develop more sustainable, environmentally sound, economical apple production and integrated pest management system for apples so fruit is grown in an environmentally friendly manner that poses minimal risks to growers and consumers. The second is to stimulate the growth of the apple processing industry in New York State by developing technologies that support commercial production of diversified, high value apple products. The third objective is to assess the economic impacts, marketing potential, and consumer acceptance of these products."

In applying for the grant, researchers were responding to market pressures and industry demand. In order for the New York apple industry to remain competitive in global apple markets, growers are faced with making long-term investments that will bear fruit well into the 21st century. Older, less productive orchards need to be replanted with dwarf and semi-dwarf trees that yield good quantities of high quality apples that consumers will buy. Production systems need to be efficient and environmentally friendly, and the industry needs improved marketing options.

"For many years, researchers at

Geneva have been developing integrated pest management (IPM) systems to improve control and reduce pesticide use in apple orchards using biological, cultural, and chemical controls that minimize risks and improve profitability," said Station Director James Hunter. "These funds will add greatly to our ability to capitalize on this work and carry out the research and extension program to bring new technologies to apple growers and apple processors. We are very pleased that the doctor recognizes the importance of Cornell's research and extension programs in apples, and has made a major financial commitment to support them."

Collaborative efforts among the state, apple growers and processors have supported apple research at Cornell in the past. These new funds will greatly accelerate the work of scientists at Geneva to strengthen the apple industry in New York and provide consumers with desirable products.

In addition to Reissig, the other investigators on the grant are Art Agnello (Entomology-Geneva), Wayne Wilcox (Plant Pathology-Geneva), Terence Robinson (Horticultural Science-Geneva), Steve Hoying (Horticultural Extension Specialist-Wayne County), Cy Lee and Mark McLellan (Food Science-Geneva), and Gerald White and Brian Henehan (Agricultural Resource and Management-Ithaca).

The New York apple industry is the second largest in the U.S., and the largest in the Northeast. Apples are produced on more than 56,000 acres and contribute an average farm gate value of \$125 million annually (1990-95 figures). New York apple growers produce 1.1 billion pounds of apples annually. They market an average of 471 million pounds of apples as fresh fruit and 577 million pounds as processing products, primarily as sauce, slices, juice, and cider, in canned, frozen and bottled form. There are three major apple production areas in New York, situated along Lake Ontario, the Hudson River, and Lake Champlain. Per capita, Americans consume an average of 46 pounds of apples each year. Of that, 19 pounds are fresh and 27 pounds are processed.

Old barn stone, \$80 per ton, delivery avail. 610-358-1675 Del. Co.

Pressure treated elec. fence stake, s. 3 for \$1; mix hay, \$1.75/bale, Freedom wheat cleaned & treated, \$5.75 bu. 717-597-4494 Frankl. Co.

Automatic #600 roller mill, PTO 540 auger discharge 610-693-5221 Berks Co.

Pedal tractors, MF metal seat & steering wheel, \$180, JD 4020 ex. cond., \$250; Hess trucks, 76, 80, 82, 83, 86, \$225. 717-776-5011 Cumb. Co.

Gruello paint filly, tri color paint filly, whitetail fawns, \$250; round bales, no rain, \$2500. 610-287-9794 Montg. Co.

TMR mixer wagon; VanDale 210 w/scales, needs auger flites, \$450 OBO 717-927-6240 York Co.

Diamond plate steel fuel tank, 300 gal \$100/OBO; '85 Dodge Ram p/u, need tune up, good body, \$800/OBO 215-968-5604 Bucks Co.

Power take off Onan generator, 7000 kw, used very little, \$500. 717-755-8170 York Co.

Jet boat, 26 ft & trailer, hayrake 717-692-3934 Dau. Co.

Compressor, Frick belt-drive w/condenser, used 1 year, \$1600. 717-297-3236 Lanc Co.

MF 204 loader tractor, shuttle clutch, works well, \$2500, Hobart welder, as-is, \$200. 717-629-0676 Monroe Co.

Bush hog D410 nding mower w/mower snow blower and plow, nice orig. cond., runs good. \$575 717-524-2408 Union Co.

IH loader 1550, 2 way cly trip bucket, ex. \$450; 1970 IH 1600 14 ft. bed, 30,000 mi \$750. 301-733-0364 Wash Co.

1200 bushel wire corn crib, new \$600; Lamco forage wagon, \$800; Roll away elevator w/motor, \$125. 410-452-5287 Harford Co.

Klenzade tank washer, \$400; Gleaner E11 combine, cab, field ready, \$1800. 717-658-7469 Snyder Co.

AC 66 and 60 combine, exc. canvas on 66 machine, \$175 for both, take all or parts. 717-359-4371 Adams Co.

60 quart Hobart mixing bowl, \$100, double head waffle machine, \$125; stainless steel 4'x3' exhaust hood, \$125. 717-467-2679 Sch Co.

1978 ATC 90 Honda 3 wheeler, 1977 Honda 90 trail bike, \$50 ea., both need some work. 717-786-4791 Lanc. Co.

1975 Int. truck w/new 14 ft steel grain body w/twin cyl. lift, \$1000. 610-683-3478 Berks Co.

8 hp Troy-Bilt rototiller, Kohler eng., new cond. \$1,150; antique stationary steam whistle, like new, \$400 OBO. 973-694-0834 Morris Co.

Vicon hay rake tedder, 3 pt PTO, Lotus 300 \$1500, 18.4, 34" rear tire, 75% tread, \$150 410-239-8252 Balt Co.

6 yr. old reg. fancy Bay Morgan mare, purebred broad breasted bronze turkeys, 1 hp, Sanborn air compressor, \$225. 301-473-9181 Fred Co.

1979 Ford F250 p/u, 4x4, for parts or fixup, \$500 OBO 973-786-5508 Sussex Co.

House: 3 BR, 9 acre, \$89,900; Farm, 120 acres, Copper Creek frontage, 1300 lbs tobacco allotment, \$224,000 540-479-2869 Scott Co.

1966 Int. cattle truck, runs good, \$2500; #34 JD harvester, \$400; Fox heavy duty blower, 4 ft. drum, \$400. 717-252-1879 York Co.

Fireplace, artificial stone front, 50"H, 62"W, 10"D, andirons, fire screen, incl., \$100. 717-823-3944, after 3.30, Luz. Co.

540 MF combine w/4 row head, VGC, priced to sell; 95 Gehl grinder mixer, VG, Hinker 22 ft. field cultiver, flat fold & spray. 717-524-4901

1974 VW body good floor rusted, good motor, make offer; short bed liner for Ford Ranger, \$125 firm. 609-397-3414 Huntln. Co. NJ

Calf hutches, 20 used round fiberglass bucket and feed holders incl., \$100 ea. 215-249-3486 Bucks Co.

Siberian Husky pups, AKC reg., blk. & wht., red & white, shots, wormed, ready 10/24, M-300, F-350. 610-869-8883 Chester Co.

JD A runs good, new battery box, \$1650, JD 6, runs good, \$3500. 518-766-2927 Renns. Co. NY

Harmon Magnum stoker stove, used one hunting season, reddish-brown option brass trim, \$1800. Lv mssg. 610-779-2825 Berks Co.

MF 850 hydro 1982 4650 hrs., \$7500. 717-626-4415 Lanc. Co.

Jack Russell Terrier pups, 3 males, both parents on prem., shots, wormed, tails docked, \$175 ea. 717-756-2595 Susq. Co.

Briggs Vanguard OHV 5.5 hp horiz. engines, 10 new in box, \$249; JD 140 garden tractor, H3, \$1200 302-834-0918 New Castle DE

Corn picker, 323 NI, shed kept, good cond., JD 34 base chopper parts. 410-348-3556 Cecil Co., MD

50 bu. old fashioned red sweet potatoes, make offer on all. 717-359-7594 Adams Co.

20 wk. old pullets, \$4 ea buff sex-link; new tob lathes 717-354-7687 Lanc. Co.

NI 2 row corn picker w/hyd. controls, diesel eng., tandem wheels, ready for field 717-354-9496 Lanc. Co.

200 theatre type padded seats, no reas. offer refused. Betw. 6-7. Taneytown, MD 410-775-7356 Carroll Co.

3 yr. old broke reg Belgian mare, bred yearling Belg. mare, reg both VG disposition and bred. 717-354-9117 Lanc. Co.

Howard rotavator 50" new tines, runs good, Cat 1 540 rpm, well used, \$300 OBO 610-647-8377 Chester Co.

Firewood, \$80/cord. 1502 Union Sq. Rd., Oxford, Rt 10 south to Camerons, right, two lefts, first farm on left Chester Co.

AC WD \$800 91 ci, continental w/clutch, runs good, \$400; want rear nm for AC WC 717-987-3935 Fulton Co.

Munnich tool press, \$75 Samuel F Stoltzfus, 514 Lees Bridge Rd., Notting-ham, Pa. 19362

1930 Ford roadster, good solid car, no top, wrong seats, \$7800 717-992-4805 Monroe Co.

Part Haflinger driving pony, 7 yrs. old, 12-1/2 hands, \$850 717-799-5210 Col Co.

AC WD needs motor, work runs good, \$950 717-425-2039 North'd Co.

89 Pont GP, 66K, 2 dr, garage kept, \$4000, 1-1/2 hp air compressor, 80 gl Harzonal 110-220v \$200 717-766-3841 Cumb Co.

Black Walnut boards, 17-1/2" wide, 14-1/2 ft long 1-3/4" thick, 15 yr barn dried nice boards 717-272-4329 Leb Co.

Ford 9N tractor, 3 pt PTO, fair cond., \$1950 717-367-5712 Lanc. Co.

2-blade sawmill edger, \$750, 10 ft by 18 in metal conveyor, \$25 a section. 610-689-5546 Berks Co.

Purebred Shropshire yearling ram, proven breeder triplet, \$135 717-949-3653 Leb Co.

4H flock dispersal, 10 quality Suffolk/Hamp. ewes, 3 reg Suffolk ewes, competitive market lamb producers 410-482-6954 Caroline Co.

Railroad tracks, 17 pcs, 33 ft long, will help load, \$60 ea or all for \$850. 610-933-6952 days. Chester Co.

JD 212 w/38" deck & snow blower, runs good, engine smokes, \$550. 610-857-3191 Chester Co.

Ford 900 tricycle tractors, \$2000 & \$3500; Ford 2 row corn planter, \$350; Case 580C backhoe, extend-a-hoe heater, lights, \$12000 717-865-7447 Leb. Co.

10' offset disc, Taylorway, \$3000, 150 bu gravity bin \$300 717-834-4764 Perry Co.

3 yr. old Tobiano paint mare, approx 14 hands, 6 weeks prof. training, nice to work with 717-483-0044 Mifflin Co.

Pygmy goat herd sellout, \$150 w/papers, \$100 w/o papers, does & bucks, 12 to choose from. 717-933-4978 Leb Co.

Firewood, seasoned, split, will deliver, \$50 a p/u load; topsoil, approx 50 loads, \$1 50/ton. 717-445-5704 Lanc. Co.

Oliver 1850, 94 hp Perkins diesel, near rear rubber, Dual remotes and PTOs, weights, new batteries and seat, \$4400 OBO. 610-488-7211 Berks Co.

Cornedale type family flock, need new home (6) 2 yr old, 2 older ewes 717-336-5860 Lanc Co.

MF 135D w/Allied loader, VGC, \$7500; Ford Jubilee & Ford 600, both need work 717-349-7551 Frankl. Co.

MF 540 combine w/1143 corn head, sell together or indiv 717-799-5247 Col Co.

1967 ford F600 cab-over, 16 ft flatbed, runs good, very good tires, \$750 OBO 717-799-0216 Col Co.

92 Buick Park Avenue, loaded, garage kept, 1 owner, Burgundy/gray leather, Michelin tires 717-248-5242 Mifflin Co.

Selling corn silage, 18 acres, want MF 33 corn head, ear corn silage kit, grain tank extension kit 717-789-9455 Perry Co.

Oliver manure spreader, PTO, 3 beater, good rubber, exc running cond., \$650, JD wheel type hayrake, \$500 717-647-4229 Sch Co.

2 Dorset rams, 3 yr. old, wasking \$150 ea., treadle sewing mach in cabinet, poor cond., BO. 717-692-4301 Dau. Co.

Pasture chain-link harrow, Oliver 89 front end loader w/ft 770, 880, Super 77/88, 1500, 1550 Oliver C cults 814-627-5149 Huntingdon Co.

1948 Farmall C w/plow & chains, good cond., 2 1964 Scouts model 80, needs work 717-386-2099 Carbon Co.

10 ton roll-away floor jack ext'd reach, \$250 610-399-5184 Chester Co.

Ear corn, Sauder loader for parts or fix up, Sauder 6 ft bucket \$60, 4 ft bucket, \$25 717-626-6517 Lanc Co.

933 Caterpillar traxvator loader, \$4500, donkeys male female tame marked, make offer 301-253-4271 Montg Co.

AC gleaner K combine, 13' flex head, new auger, \$1500 MC rotary six for parts 717-726-3398 Clinton Co.

JD 950 2WD ag/tires, exc cond., \$65 A CA tricycle w/cults, sicklebar 2R planter, good tires/tn, runs great 215-343-0169 Bucks Co.

Coal wood, boiler, WC 120, 120,000 btu, New Yorker, MFW Co new, never used, \$1500 610-760-0699 after 6 pm Lehigh Co.

Cat D2 dozer, serial #5U15044, very good under-carnage, rear ripper or sub-soiler attachment, PTO, runs good, \$4000 firm 610-377-0372 Carbon Co.

Woods RM-400 finish mower, Cat 1 3 pth, 540 rpm, exc shed kept, \$850 609-476-2048 Atlantic Co., NJ

Case 1410 diesel tractor 80 hp, 18-4-34 rubber, 2 owner, exc cond., \$5000, Woods 6 ft trailer, type, rotary mower, good cond. \$500 301-293-3025 Fred. Co.

Hunting scabbard for on saddle or your rifle pleasure in hunting, \$25 717-292-7651 York Co.

Vac case, WFE, 34" tires, front end loader, 2-14 plows, cultivators, 7' 3 pth blade, 6' bush hog, flat pulley, 6 dear-born sickle bar, lifting boom 410-398-7680 Cecil Co.

16 9x38" tire chains, \$295, 18 4x38" used, some cracks, good for duals, \$200 pair; 13 9x38 used tire, \$95 717-359-8283 Adams Co.

Reg Duroc boar, service age, 2 Duroc gilts exc genetics, priced reas., 724-593-2838 Westmoreland Co.

Foley saw filer model 387 w/stand, good cond, \$275 Berkel automatic meat slicer model 818, good cond \$575 717-530-8450 Cumb Co.

Avid microchip reader, pocket size, \$150, reads Dectron too, 15 Avid microchips, 14mm size, syringe, certifies, \$40 717-284-5249 Lanc. Co.

4020 SC PS cab, 20 hr on rebuilt eng., new paint & tires, make offer or 730 DWF & cash. 410-771-4521 Balt Co.

Int. 140 belly mount sickle WFE, \$2000 Ingrand, 170 CFM dies comp. \$850, 2-HD5 dozers, \$3500/pair Case 24" buck, \$300 410-378-2785 Cecil Co.

35' alum. storage trailer, \$750 Best time, 7 am to 5 pm, 717-768-8197 Lanc Co.

Case Rip-tux tooth, \$275, Pulley JD model Loria \$625, 420W JD \$3375, hyd cyl for JD H, \$110 215-257-4885 Bucks Co.

1960 Int. dump truck, 6 cyl gas eng., 33,000 GVW, 10 ft bed, good paint, \$1200/OBO 717-834-5774 Perry Co.

Com/Implement shed, wooden beams w/slanted boards, 28x40, you dismantle, BO, same Saturno 80 hp 4WD, \$5000 717-933-8962 Berks Co.

NI 324 2 rw corn picker, VGC 717-292-1343 York Co.

Sand blasting cabinet, 26x20, 12" Vernier height gage, satin finish, \$50 ea 717-336-3276 Lanc Co.

Bodco liquid hog manure vacuum pump, fill pipe incl., like new, \$1600 717-547-6793 Lyc. Co.

Farmall Cub, w/5 ft belly mower, turf tires, exc cond., \$2200, 12" Backhoe bucket, \$100 609-298-6440 Buri Co.

Cleaned & bagged Rye seed, JD 38 harvester, 2 RN, exc cond., Walsh 300 gal, 3 pt. sprayer tank 717-653-7116 Lanc Co.

Corn picker, 323, \$2500, round corn crib, Behlen, also bin wagon, 1052 Lancaster Pike, Quarryville, near Buck Lanc Co.

New Ariens Sierra, 1440G, 40 in cut, \$2500 OBO Scag SSZ48 w/catcher system, \$2000, Thomas skid-steer adapter plate, mod 510U-1267 201-337-7722 Bergen Co., NJ

1988 Ford F150 shorbed, auto, sliding rear window, fuel inj 302, new tires, 61K miles, very clean, \$5000 732-329-3053 Middlesex Co.

Clarke floor washer model 24000, new vacuum motor & air compressor, installed other spare parts incl., \$700 717-354-4981 Lanc Co.

Wheelhorse tractor model 520, auto drive, hyd lift, 60" mower deck, ex cond., can finance, ready to work, \$#795 717-292-3640 York Co.

Freeman loader w/manure, ground & snow bucket to fit M or H Farmall, VGC, \$650 717-428-2735 York Co.

Disc, Oliver 252, \$750, neg., Oats, 10 ton, \$2 15/bu., free deliver w/in 15 miles of Adamstown 610-777-8905 Berks Co.

6-8 ton feed bin, \$75, 8' bale feeder, \$100 OBO 2 cows/calves, Holstein Angus cross 717-244-3914 York Co.

175 4x5 round bales of mature grass hay, \$60 After 7 pm, 717-352-2776 Frankl Co.

## MAILBOX MARKET FOR SALE

IH 710 3 pt. 18" auto reset plows, \$1700; horse drawn dirt scoop, \$100; JD roll-a-matic, compl, \$150, all/VGC, bef 2 30 pm/iv. mssg. 301-582-2526 Wash. Co.

Gehl 7200 flail chopper, exc. flails, \$250 OBO; Oliver 5 bitm hyd. reset plow, \$250 OBO 717-866-4446 Leb. Co.

24 ft Smoker hay & corn elevator, gas eng., rubber tires, \$300 OBO. Eves., after 6 p.m. 610-384-7127 Chester Co.

1985 Honda Accord LX, 227K miles, exc. body, runs, good parts car, \$375. After 6 pm, 610-948-1463 Chester Co.

JD hayrake, 896A, \$400, Missouri grain drill, 500 bales mulch, Ford 821 tractor, \$1800, Hoosier kitchen cabinet. 717-467-2609 Sch Co.

Ripper for 2150 Case dozer, 1 tooth, Hesston stacker Eves, or mssg. 717-345-3128 Lyc. Co.

Snap-on bench top brake lathe, good cond., no acc, \$800, 16 ft truck box alum insulated, 2 side doors, fair cond., \$500 OBO 610-932-2230 Chester Co.

Red and fallow deer, quality breeding stock, turn unused pastures into a good return per acre. 717-869-1311 Susq. Co.

Jersey Holstein cross cow, fresh 9/16/98, good family cow, third. Rufus Martin, 1105 Kramer Mill Rd., Denver, PA 17517 Lanc. Co.

Small metal lathe, \$75; 95 phase elec., hardly used, Chevy 1/2 ton 4x4; steel rally wheels, \$20 ea., pole building corner trim, 10' long. 717-246-2906 York Co.

2 used PortaHuts, small size, \$50 ea. 717-292-2012 York Co.

1929 McCormick Deering 1020 tractor, restored on full steel, asking \$3000 717-359-7571 Adams Co.

1975 Gleaner fks. exc \$3500; 13 ft flex avail wheat straw, \$90/ton 717-292-6441 York Co.

'76 GMC truck, rebuilt eng., new brakes, drum, new barrel carb., 16 ft. alum. bed, 18-4-34 tractor tire, like new. 410-357-8246 Md.

2-acre farmette in Dover, De., lg. 3 BR, 2 ba house, 30'x18' bam, 38'x20 garage, 16'x8' shop, good for horses, \$150,000 302-492-3261 Kent Co.

Portable band saw mill, 3 phase elec., hardly used, \$8000; 3 phase generator, \$2000, low hrs., 302-239-5560 New Castle Co. DE