Plants spot nuclear radiation levels

By PAM LACOVICZ
Daily Collegian Staff Writer

A new type of nuclear plant is being perfected, but this plant doesn't give off radiation — it detects it.

The "Nuclear Plant" is being marketed by the Contemporary Gifts Corp. of New York. It is a flowering perennial belonging to the spiderwort family.

Pink spots appear on the blue or purple blossoms of the plant when a low level of radiation is present. The spots appear between 15-21 days after exposure.

Ramie Arian, secretary-treasurer of the corporation, explained the plant's reaction.

"When exposed to radiation, the cells of random living things mutate unpredictably," he said.

But in the Nuclear Plant, the color cells mutate predictably from blue to pink, he said.

Research on the plants was originally conducted in the early 1960s at Brookhaven National Laboratory and was funded by the federal government. Sadao Ichikawa, a genetic scientist, continued development of the plants at his laboratory in Japan, Arian said.

Arian said that at the same time he and his partner, Steven Reuben, decided that a simple, inexpensive way of monitoring nuclear radiation was needed.

Remembering the mood ring fad of a few years ago, they decided to try putting a mini geiger counter in a piece of jewelry. However, they calculated that such a piece of jewelry would cost about $400, he said.

Then, Arian said he read an article in Mother Jones magazine on the development of plants that biologically detect radiation. After unsuccessfully trying to contact Ichikawa, Arian said he contacted the Brookhaven laboratory.

Contemporary Gifts Corp. conducted about three or four months of research on old plants they received from Brookhaven, Arian said.

They discovered what they wanted in an existing garden plant. Because this plant is found growing throughout the country, Arian would not reveal the name of the plant.

Ann Baittinger, a public relations spokeswoman at Brookhaven, said the laboratory had conducted tests on a plant called *tradescentia*.

This plant needs a carefully controlled laboratory environment because it is sensitive to just about anything including changes in light, temperature and humidity, she said.

The plants marketed by Contemporary Gifts, however, are not the same as Brookhaven's plant and react to virtually nothing but radiation, Arian said. It is possible to get a random mutation, he said, but there would be just a single spot, not a pattern, on the blossoms.

Arian said that the plant is useful where ever a possibility of a radiation leak exists.

These plants are useful for people who are subject to any radiation leaks from microwave ovens to X-ray machines, he said.

Researchers at Brookhaven are broadening the scope of the plant's detection to other dangers such as pollution and toxic wastes, Arian said.

He said that Ichikawa's plants are grown primarily indoors. Contemporary Gift's plants survive both indoors and outdoors, he said.

Contemporary Gifts is working to get a bright color contrast in the plants, Arian said. Brighter colors will make it easier to detect anything that is causing a mutation in the plants.

Richard Craig, University associate professor of plant breeding, said he has never heard of the Nuclear Plant, but it is possible for certain types of plants to mutate because of radiation.

—by Rebecca Clark

2 chairs taken from Sheraton

● Two high back arm chairs were missing from the lobby of the Sheraton Penn State Inn, 240 S. Pugh St., the State College Police Department said yesterday. Police estimated the value of the chairs at $800.

Police log

● William E. Stoner, equipment supervisor at Rec Hall, told University Police Services on Monday that two backpack's belonging to two female students were missing from the new racquetball courts at Rec Hall. Police estimated the value of the backpacks at $183.

—by Rebecca Clark

STAR WARS CINEMA 116 Hester St./237-7857 — ENDS THURS 7:30 & 9:45 MON & TUES $1.50 — PG — SYLVESTER STALLONE in "NIGHTHAWK" (R) — DAILY 8:00 & 10:00. Bargain nights Mon. & Tue. All Seats $1.50

Teaching Opportunities in Montessori — A.M.S. Approved 1981 Summer Teacher Training Program in Phila., PA & Ithaca, NY — CALL TOLL FREE 800-523-0874 PA CALL COLLECT 215-233-0141 — AERCO Montessori 1400 E. Willow Grove Ave., Phila., PA 19118

— Tonite — at THE BRICKHOUSE Dana Austin guitarist/vocalist (don't forget to bring your limericks) THE BRICKHOUSE TAVERN — we serve til 2:00 a.m. (around the corner from Uncle Eli's)

Fame THEATRE 129 S. Allerton St. 237-2112 — ENDS THURS 7:15 & 9:45 MON & TUE $1.50 — Presented by United Artists — R

PENN STATE SUB SHOP #1 — 11:00 a.m. - 2:30 a.m. Sun. til Midnight — 225 E. Beaver Ave. above the Brewery — DON'T BE RAILROADED

Forged by a god. Found by a King. EXCALIBUR — R — MOVIES BEAVER & GARNER 237-0003 — Nightly 6:30 & 9:15 Matinees Thu. & Sun. 2:30 Thurs. Matinee Only 1.50

As timely today, as the day it was written. A ROMAN POLANSKI FILM "TESS" — PG — COLUMBIA PICTURES — STATE I 128 W. COLLEGE AVE. 237-0003 — Nightly 7:00 & 9:00 Matinees Wed. & Sun. 2:00 Wed. Matinee Wed. Matinee Co. ly 1.50

RINGO STARR BARBARA BACH CAROMAN — PG — UNITED ARTISTS — STATE II 128 W. COLLEGE AVE. 237-0003 — Nightly 7:30 & 9:30 Matinees Wed. & Sun. 2:00 Wed. Matinee Only 1.50

LESLEY-ANNE DOWN FRANK LANGELLA SPHINX — PG — Someone is hunting tourists — GARDEN 114 S. ALLEN 237-0003 — Nightly 7:15 & 9:30 Matinees Tues & Sun. 2:00 Tues. Matinee only 1.50

Modern Romance — A COLUMBIA PICTURES RELEASE — R — SCREENING ROOM 127 FRASER STREET 237-0003 — Nightly 7:30 & 9:30 Matinees Tues. & Sun. 2:00 Tues. Matinee Only 1.50

Warren O. Fitting Tonight Playing Oldies But Goodies — THE SALOON 101 HIESTER ST. — serving Pepsi-Cola

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SUN Corp. LOW COST STUDENT APARTMENTS & ROOMS — near campus & parking — 10% DISCOUNT FOR SENIOR CITIZENS — Now renting for Summer & Fall — Call 238-4938 (days) 237-3084 (eve.) — Office 418 Clay Lane (Behind Don's Gulf Station)

WEEKEND WINNERS: HOPSCOTCH — STARRING WALTER MATTHAU GLENDA JACKSON NED BEATTY — 121 Sparks — $1.50

THE BEST OF THE 2nd ANNUAL NEW YORK EROTIC FILM FESTIVAL — RATED XXX — OFFICIAL JUDGES INCLUDE XAVIERA HOLLANDER — 111 forum — $1.50 — U-034

arhs weekend movies

BOY SCHEIDER A PLACE FOR THE JAZZ — Prepare yourself for what goes on before the curtain goes up — Waring Lounge — $1.50 FRI & SAT 7, 9:15, 11:30 SUN 7 & 9:15

The Army was no laughing matter until Judy Benjamin joined it — GOLDIE HAWN PRIVATE BENJAMIN — FRI & SAT 7, 9:15, 11:30 $1.50 SUN 7 & 9:15 105 Forum

"from the moment he saw it, he knew it would destroy him or carry him where no one had ever been before" — The Black Stallion — FRI, SAT 7, 9:15, 11:30 SUN 7, 9:15 108 Forum $1.50

"You are about to enter the most awesome power in the universe" — BLACK HOLE — FRI & SAT. 7, 9, 11 SUN 7 & 9. $1.50 — Pollock Rec Room

CAN FILM FESTIVAL — Friday, May 8th 8:00 p.m. HUB Ballroom — CALL FOR ENTRIES — Closing date 5:00 p.m. April 27th — Deliver films to Room 17 Arts II Building

To be eligible
(a) Films must be no more than 15 minutes in length.
(b) Produced as part of student courses at Penn State University Dept. of Theatre/Film
(c) Films must have soundtrack even though it wasn't originally part of the film.
(d) Produced between May 2nd 1980 and May 8th 1981.

Films must be labeled with Name, Phone, Address & Title of Film. The Student film Organization retains the right to reject any film that doesn't meet with the above requirements or standards that are required for presentation at the festival itself.

U-105

RODEO TIME IS MILLER TIME AND THE TIME IS "THIS WEEKEND!"

UNDINE RODEO-81

American Rodeo Association Sanctioned Professional Rodeo

"FRONTIER DAYS in CENTRE COUNTY"

Held at Undine Fire Co. Carnival Grounds, Blanchard St., Bellefonte

Saturday, April 25, 7 p.m. ★ Sunday, April 26, 2 p.m.

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THE TUBE

Wednesday Evening

6:00 (3) WEATHER-WORLD
(6) STARSKY AND HUTCH
(8)(10)(22) NEWS
(9) JOKER'S WILD
(11) HAPPY DAYS AGAIN
(21) NEWS (CONTINUED FROM DAYTIME)
6:30 (3) EXPLORING LANGUAGE
(8) NBC NEWS
(6) ABC NEWS
(9) TIC TAC DOUGH
(10)(21)(22) CBS NEWS
(11) SANFORD AND SON
6:59 (6) DAILY NUMBER
7:00 (3) MACNEIL-LEHRER REPORT
(6) (8) M.A.S.H.
(9) DAILY LOTTERY NUMBER
(10) BULLSEYE
(10)(21) TIC TAC DOUGH
(11) BARNEY MILLER
(22) PRESCRIPTION FOR LIFE Joe Campanella hosts this fund-raising program for medicine, supplies and equipment for hospitals in Third World countries.
7:01 (8) PM MAGAZINE
7:30 (3) DICK CAVETT SHOW
(6) ALL IN THE FAMILY
(9) JOKER'S WILD
(8) TIC TAC DOUGH
(10) BASEBALL New York Mets vs Pittsburgh Pirates
(10) FAMILY FEUD
(11) NEWS
(22) HOLLYWOOD SQUARES
8:00 (3) MEETING OF MINDS In the first 'all artists' evening on Steve Allen's Meeting of Minds, Renaissance genius Leonardo da Vinci, poet-mystic William Blake and violinist Niccolo Paganini gather to dispute the nature of reality. (60 mins.)
(8) PM MAGAZINE
(6) REAL PEOPLE An order of monks in Oklahoma who serve as the town's volunteer fire department, an Ohio couple who keep alligators, wolves and skunks in their home, a dog that skis, and a profile of a handicapped cowboy. (Repeat; 60 mins.) (Closed-Captioned; U.S.A.)
(6) THE LOVE BOAT Captain Stubing's woman-losing brother, Marshal, boards the ship to marry his wealthy fiancee, but may have a change of heart when he rekindles a flame with a former love. (Repeat; 60 mins.)
(10)(22) ENOS Enos Strate becomes a one man police force when an epidemic of 'Blue Flu' strikes the department and he's left alone to protect a pretty woman judge from a killer's wrath. (Repeat; 60 mins.)
(11) THE BASTARD Stars: Andrew Stevens, Lorne Greene, John Jake' stowering best-seller of the proud men and women who forged the American colonies into a nation focuses on Philip Kent and his family.
(21) BILLY GRAHAM CRUSADE
8:30 (9) MERV GRIFFIN
9:00 (3) WORLD 'No More Mountains: The Story of the Hmong' This film tells the story of the Hmong, or 'free people', a tribe of LAOTIAN MOUNTAIN PEOPLE, FROM THEIR EARLY TIMES TO THEIR PRESENT STATE OF HOMELESSNESS IN REFUGEE CAMPS AND FOREIGN COUNTRIES. (60 mins.)
(8) DIFF'RENT STROKES When Arnold and Willis learn that Kimberly has been to an obstetrician, they prepare to be uncles. (Repeat) (Closed-Captioned; U.S.A.)
(6) ALOHA PARADISE Debbie Reynolds plays a dual role as Sydney and Sydney's 80 year old grandmother, an eccentric grand dame of the theatre, and Fran falls in love with a dashing young man who sends her notes written by another man. (60 mins.)
(10)(21)(22) CBS WEDNESDAY NIGHT MOVIE 'Outlaw Blues' 1977 Peter Fonda stars as a singer and songwriter who returns from his award Susan Saint James stars as the woman who exploits his situation to make him a star. (2 hrs.)
9:30 (6) THE FACTS OF LIFE After four of the girls get drunk at a band wreck the school van, they are put on probation, living in cramped quarters above the kitchen and waiting on tables in the cafeteria. (Repeat) (Conclusion)
10:00 (3) FABULOUS PHILADELPHIANS: FROM ORMANDY TO MUTI 'The Verdi' Requiem' "Riccardo Muti leads the Philadelphia Orchestra and the Mendelssohn Club Chorus in a performance of Verdi's 'Manzoni Requiem', from Philadelphia's Basilica-Cathedral of Saints Peter and Paul. (90 mins.)
(9) NEWS
(8) QUINCY Quincy rushes to an Arizona Indian reservation where his foster son and two others are stricken by bubonic plague, and efforts to halt the disease's spread are hampered by greedy resort owners. (Repeat; 60 mins.)
(6) VEGAS Dan Tanna leads himself back in Air Force blue temporarily when a Russian defector lands a super secret plane outside Las Vegas, and Dan tries to protect the pilot and his craft from a deadly trio dedicated to their destruction. (60 mins.)
(11) NEWARK AND REALITY
(11) INDEPENDENT NEWS
10:30 (9) MEET THE MAYORS
(11) NEWS
11:00 (9) M.A.S.H.
(6)(8)(10)(21)(22) NEWS
(9) BENNY HILL SHOW
(11) HAPPY DAYS AGAIN
11:30 (3) ABC CAPTIONED NEWS
(9) KOJAK
(6) THE TONIGHT SHOW Guest host: David Letterman. Guests: Teri Garr, Joe Graedon. (60 mins.)
(6) ABC NEWS NIGHTLINE
(9) MAUDE
(10)(21)(22) NBA BASKETBALL PLAYOFF GAME Teams and site to be announced.
(11) ODD COUPLE
12:00 (8) LOVE BOAT The Dummies' A ventriloquist team begins to solve its marital problems through dummies dialogue. (Repeat; 70 mins.)
(9) MOVIE -(ADVENTURE) **½ "Mississippi Gambler" 1953 Tyrone Power, Piper Laurie The adventure and loves of a riverboat gambler who decides to build an honest gambling house in New Orleans. (2 hrs.)
(11) THREE STOOGES
12:30 (9) HOGAN'S HEROES
(6) TOMORROW COAST-TO-COAST Guest: Phoebe Snow. (60 mins.)
(11) TWILIGHT ZONE
1:00 (9) RAT PATROL
1:30 (9) ADAM 12
(10)(21) NEWS
(11) INDEPENDENT NEWS
(22) NEWS (TIME TENTATIVE)
2:00 (9) MOVIE -(HORROR) ** "Night Creatures" 1961 Peter Cushing, Yvonne Romain, 18th Century: A British Navy Captain investigating a lip on wholesale smuggling, discovers the town vicar is a pirate who was assumed dead. (2 hrs., 1 min.)
(9) JOE FRANKLIN SHOW
(10) THOUGHT FOR THE DAY
(11) MOVIE -(ROMANCE-DRAMA) **½ "Madame X" 1966 Lana Turner, John Forsythe. An attorney, defending a woman accused of murder, doesn't know that she's his mother. (2 hrs.)
3:00 (9) MOVIE -(DRAMA) **½ "Redneck" 1973 Telly Savalas, Mark Lester. A psychopathic killer from Memphis and his partner in crime take a teenage boy as a hostage. (115 mins.)
4:00 (11) BEST OF GROUCHO
4:30 (11) ABBOTT AND COSTELLO
5:00 (9) PRAYER
(11) FAMILY AFFAIR
5:04 (9) NEWS
5:30 (9) DANIEL BOONE
(11) NEWS

Crossword

by Mike Shenk
(Answers in Tomorrow's Classifieds)

Across
1 Horseman's name
5 Relatives of "Eureka!"
9 Contends
14 Hamlet, e.g.
15 She loved a swan
16 Florida city
17 Famed volcano
18 Cheese or worms
19 Less cooked
20 Play by 10-Down
23 Navigator's aid
24 Impolite
25 Frigid
26 Inflating
30 Leg part
33 Hornet's defense
34 School of whales
35 Throw
36 Full of rocks
37 Wander
38 Conjunction
39 Mortification
40 Sophia
41 Songbirds
43 Hoagie
44 Not sweather
45 Mother of Queen Beatrix
49 Another play by 10-Down
53 Emerson's middle name
54 Arm bone
55 Hourglass need
56 Recent space thriller
57 Golfer, at times
58 A single instance
59 African farmers
60 Pert talk
61 Some votes

Down
1 Playwright Clifford
2 Tunning tool
3 Addition
4 Regaling
5 State capital
6 Center
7 Mine entrance
8 Sullen
9 Coney Island snack
10 Playwright Sean
11 Catherine —
12 Bebi —
13 Reddish chalcedonies
21 Bulletin board item
22 Somewhat liquidy
26 Tiny particles
27 Frankenstein's aide
28 Church part
29 Federal agents
30 Some resorts
31 Aaron or Williams
32 Amos's partner
33 Police jobs
36 Patrucho's Kate
37 Mrs. —, of "The Graduate"
39 Where many sheriffs confronted the bad guys
40 Rara avis
42 Fire escape
43 Glucose and fructose
45 Characters in the Tarzan movies
46 Midwest colony
47 White House name
48 American mountain range
49 Mop up
50 Glowing circle
51 "I cannot tell —"
52 Dog's bane

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