

## Modified foods stir safety debates

Farmers, scientists and consumers disagree on risks from altered foods

BY YOLANDA LUKASZEWSKI  
The Battalion

"We're running out of farmland," said Mari-  
sh Adamek, a Texas A&M junior horticulture  
major. "If we can produce more tomatoes this  
year, we should."

For Adamek, modifying foods is not a contro-  
versial issue, whether the modification is through  
conventional methods or genetic engineering.

Adamek's family practices a form of biotech-  
nology in their peach orchard near Yoakum by  
grafting, or growing together, high fruit-pro-  
ducing tree tops with strong root stocks of oth-

er trees. These two parts combined produce bet-  
ter peaches.

Scientists have long used these traditional or  
classic breeding techniques to develop new vari-  
eties of peaches.

But greater controversy surrounds organisms  
that have been genetically engineered. The public  
perceives these foods as riskier and more danger-  
ous than those foods bred using the methods which  
have been implemented for hundreds of years.

A report released Wednesday by the Nation-  
al Academy of Sciences said that genetically en-  
gineered crops seem to be safe. But it's too ear-  
ly to tell if the report will have an effect on  
public opinion.

Small-scale farmers fear that they will be un-  
able to afford genetically altered seeds. Con-  
sumers worry about labeling and food allergies.  
And environmental groups protest against po-  
tential ecological damage.

Last week, the Associated Press reported that  
farmers nationwide are projected to plant fewer  
genetically-altered crops, especially corn altered  
to produce Bt, a biopesticide. The expected de-  
cline is attributed to a drop in market interest in  
genetically-altered crops and a decline of the  
European corn borer, the  
primary insect targeted by  
the biopesticide corn.

In January, Plano-based  
Frito Lay announced that it  
would stop using geneti-  
cally-altered corn in its  
products.

Texas, however, might  
not reflect the national  
trends in Bt-corn planting  
because there are fewer  
acres of corn production  
here, and the European corn  
borer is still a common pest  
in Midwestern states, but  
not in Texas, said Dr. Tom  
Vestal, lecturer and Exten-  
sion Specialist in the De-  
partment of Agricultural  
Education.

The planting of cotton,

however, may reflect national projections.

"In Texas, because cotton production is in-  
tense, local use of biotech varieties for crop pro-  
tection from cotton bollworms and weed infes-  
tations may follow national projections more  
closely," Vestal said.

Some scientists remain proponents of the

**"People have to eat. The  
more that you can pro-  
duce, the better."**

— Mariah Adamek  
junior horticulture major

technologically altered foods.

They see genetic engineering and genetical-  
ly-modified crops as ways to improve nutrition,  
end world hunger, apply less pesticide and her-  
bicide and extend the shelf life of produce.

Earlier this year, for example, a team led by  
Dr. Craig Nessler, professor of biology at A&M,  
successfully engineered a head of lettuce with

seven times the amount of vitamin C of normal  
lettuce. The new lettuce could help battle scurvy, a  
disease caused by dietary deficiencies of vitamin C.

Wealthier nations will use genetic engineer-  
ing to improve the value of crops, but for the  
third world nations, such crops could become a  
matter of survival, Nessler said.

"Scientists have to eat, and they have chil-  
dren of their own," he said. "We'd be reluctant  
to harm our children. We also feel a social re-  
sponsibility to less fortunate countries," he said.

Other scientists said the question boils down  
to how much risk people accept in their lives.  
"You always have some risk. The real ques-  
tion is: Have we created an unacceptable risk, or  
do we not want this risk?" said Dr. James Gio-  
vannoni, A&M assistant professor of hortical-  
tural sciences.

Adamek said she plans to work on her fami-  
ly's orchard after she graduates. She also plans  
to sell vegetables commercially. Depending on  
the area where she will plant her crops, she will  
use either modified or unaltered seed to grow  
more and bigger vegetables.

"People have to eat," she said. "The more  
that you can produce, the better."

## A&M panel describes public's gene fears

BY LINDA WANG  
Special to the Battalion

The recent explosion of information about genetical-  
ly-modified foods leaves many people not knowing exactly what  
to believe.

According to John Howard, CEO of Prodigene, a College  
Station-based biotechnology company, part of the problem is  
that the public is hearing different opinions from many differ-  
ent groups.

"There are a lot of agendas going on that's left the con-  
sumers absolutely confused about what the issues are,"  
Howard said.

Howard, and Dr. Susanna Priest, Texas A&M professor of  
journalism, spoke on a panel Wednesday about issues in ge-  
netically-modified foods as part of the Bioethics Awareness  
Week, sponsored by the Texas A&M Bioethics Forum.

Howard said that, contrary to public perception, genetical-  
ly-modified organisms (GMOs) are very safe.

"These new products have undergone more safety tests  
than any other products that we've been eating," Howard said.  
"We're now left with the issue of how to give the public more  
understanding of what's going on."

Priest says that, in general, the public has legitimate con-  
cerns about genetically-modified foods.

"One of the tendencies over the last decade is to say that  
people need more education and then they will accept genet-  
ic engineering of foods," Priest said.

But she said her research of the media and public percep-  
tions of biotechnology has revealed that people are concerned,  
not only with the risks to their health, but also with environ-  
mental impact, economic concerns and moral issues.

"I think the more debate and discussion we have [about the  
issues of genetic engineering], the better," Priest said.

### Space spectacle

As Mars, Jupiter and Saturn  
move toward alignment with  
other planets in May, they afford  
the earthbound a week's worth  
of heavenly views in April.

• Alderbaran



Source: Sky and Telescope Magazine AP

### April brings planets into view, alignment

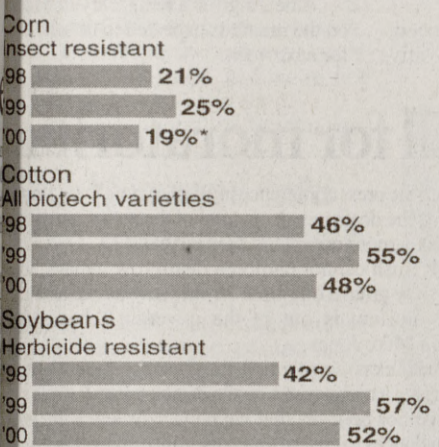
Three planets — Jupiter, Saturn and  
Mars — along with the moon, will provide  
a remarkable display for stargazers across  
North America according to Don Corona,  
program director for the Texas A&M Uni-  
versity observatory.

Corona said that at approximately 8 p.m.  
in the southwest sky, the crescent moon will  
be 30 degrees above the horizon. He said  
what will look like a bright star nearby is  
Jupiter. Mars will be just north of Jupiter,  
and Saturn will be north of Mars and less  
than three degrees west of the moon. Peo-  
ple will be able to view these planets with  
the naked eye.

— Noni Sridhara

### Biotech crops

Farmers are planning to scale back  
genetically altered crops amid  
concerns about their impact on the  
environment and controversy overseas  
about biotech food. Here are the  
percentages of the major crops that  
are biotech.



\*Includes some conventionally bred  
varieties.

Note: 2000 figures are projected crops  
based on USDA survey of farmers in major  
producing states.

Source: USDA's National Agricultural  
Statistics Service AP

# bull, bear or chicken?

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