## A LOOK AT FOREIGN AGRICULTURE

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In April, 1978, I had the opportunity to travel to six European countries with Class VII of California's Agriculture Leadership Program.

Before discussing the agriculture that we saw I would like to consider this Leadership Program because I believe it is one of the most important developments that has taken place in agriculture in recent years.

The program was initiated by the Agricultural Education Foundation and is funded entirely by agricultural organizations. It costs \$240,000 to run a class of 30 through a two-year program. The objective is to select young people between the ages of 27 and 40 who have demonstrated leadership ability and show the potential for even greater leadership. Working with the Agricultural Education Foundation are the deans of agriculture of four California universities — the two Cal Polys, Fresno State and the University of California at Davis.

Candidates are interviewed by six screening committees, with a requirement that 80% of the class must be from production agriculture. The other 20% may be from agribusiness.

Starting in November the class attends monthly seminars sponsored by the universities or by agriculture businesses. The seminars stress economics, politics, communications, education, and culture such as art, music, drama, etc. Studies in the first year address national issues, with a two-week trip to Washington, D.C., and the Eastern U.S. The second year features international issues, with a three-week trip abroad.

The objective is to provide broadening experience for the class members with the hope and expectation that they will become better spokesmen for agriculture and more effective leaders.

Our trip started in Sweden, where we spent a couple of days with Sweden farm families. In each country we were briefed first at the American Embassy. The Agriculture Attache was our key contact. In most cases he arranged for us to talk with the American Ambassador and to be briefed by specialists in economics, politics, and agriculture. Our next step would be with the country's Ministry of Agriculture and then we would visit farms, factories and cultural activities.

I am going to give you my impression of the countries vis-

ited, based upon only a few days' observation.

**Sweden** — a very clean and industrious country, people very friendly to the U.S. Farms quite large by European standards, highly mechanized. Tax structure encourages heavy capital investment. Farmers like socialist government. Prices are assured before crop is planted. Heavy subsidies, trained labor. But they hate to pay 50% or more income tax. Environmentally conscious but six nuclear plants operating, with seven more being built.

Russia — Obsessed with the need to be biggest. Still fearful of the threat from the east. Common people in the cities generally non-communicative; somewhat disinterested in Americans. Huge black market flourishing openly. Good technology in agriculture at the high level. Difficulty in transmitting it down to working man's level. Russia is the world's number 1 producer of tractors.

Rumania — Poorest of East European countries after Russia. Common people friendly, inquisitive. Have a big movie business. Like American movies — especially westerns. Still very much a police state — no freedom of movement. Farms collectivized, well organized. Managers have a lot of leeway in decisions.

Yugoslavia — Still a socialist, police state. Proud of independence from Russia — consider themselves Western Europe rather than Eastern. Private farms larger, houses better kept. Want more trade with U.S. — involved in several joint ventures. Love sports — rank third in the world in basketball. Hosted Olympics boxing while we were there.

Hungary — Best relationship with U.S. of any Eastern European country. Return of crown of St. Stephen helped. Want "most favored nation" status with U.S. Large collective farms — sell \$15 million worth of canned ham per year to U.S. Have a sophisticated pharmaceutical industry. People have more freedom than in past — many families reunited. May travel to Austria without visa. Many may emigrate to the west. Language very difficult. Numerous "Ban the neutron bomb" posters.

Austria — Beautiful, prosperous capitalist country. Prices sky-high, inflation, unfavorable balance of payments. Friendly — like Americans and most others. Open hatred of Russians. Population declining and growing old. Young people moving to Germany and other countries for better jobs. Inefficient agriculture — small farms, one tractor per 27 acres. Agriculture is highly subsidized, since the government pays more for food than they sell it for.

## SUMMARY

We saw a diversity of agriculture, much of it unlike our own.

We could see value of collectivizing land or increasing size of farms in regard to management and mechanization.

We could see advantage of managed economy where everyone has a job.

We could see effects of lack of freedom — lack of incentive, absentee planning, inefficient use of farm implements.

Not one of us would have traded our agriculture for the best of theirs.

## CUTTING PROPAGATION OF EUCALYPTUS FICIFOLIA USING CYTOKININ-INDUCED BASAL TRUNK SHOOTS

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Abstract. The cytokinins, PBA and BA were the most effective treatments tested in inducing buds to break in the lignotuber as well as the upper trunk region of Eucalyptus ficifolia. BA at a concentration of 0.8% in water-ethanol (1:1) caused an average of 229 bud breaks per tree. Stem cuttings taken from the PBA-induced shoots exhibited a greater propensity to the root when taken from the area of the lignotuber than when taken from higher on the trunk. Furthermore, cuttings from basal parts of shoots, originating from the lignotuber, rooted better than cuttings taken from the apical portion of these shoots.

## REVIEW OF LITERATURE

It is well-known that some species of eucalyptus can be easily propagated by using stem cuttings of shoots arising from lignotubers, whereas cuttings from the periphery of the tree are unrootable (7,10). Chattaway (3) described a lignotuber as a woody swelling in the stem of the eucalypt which contains an abundance of buds with contorted xylem elements. The lignotuber develops in the axils of the cotyledons and in the immediate successive nodes of most of the eucalypts. Carrodus (2) concluded that the primary importance of the lignotuber is the enormous number of buds held in a protected position which have the ability to produce new growth following damage to the tree.

The buds held in the lignotuber are believed to be adventitious in nature; that is, they do not initiate from the apical meristem or axillary buds. The buds of the lignotuber have been