

### Eight new projects link cassava research across four continents

Research into the root-crop cassava has been a major concern of Canada's International Development Research Centre (IDRC) since its establishment in 1970. Cassava currently provides over half the calorie intake of between 200 and 300 million people and within 30 years this number appears likely to grow to about 500 million.

A main impetus to research into improving cassava both as food for humans and as feed for animals was given by a grant in 1971 from the Canadian International Development Agency (CIDA) of \$2.5 million to the Centro Internacional de Agricultura Tropical (CIAT) in Colombia and a further \$750,000 to be spent at Canadian institutions on supporting research. The IDRC became the managing agent of this co-operative program.

The research program is now spreading out from this Colombia-Canada base, and eight new projects involving grants totalling \$612,675 and carrying research further into Latin America, Africa and Asia were announced recently by Dr. W. David Hopper, IDRC president.

One grant of \$69,500 to the University of Guelph, Ontario, is to pursue research into a means of microbiological enrichment of cassava by utilizing micro-organisms to raise the protein level of cassava, whose root in its natural state is edible by animals but has a very low level of protein. Another grant of \$32,000 to the Prairie Regional Laboratory in Saskatoon, Saskatchewan, will allow researchers to concentrate on a technique for producing disease-free cassava plants by cell cultivation.

A third grant, of \$65,000, is to enable Dr. Truman Phillips of the Department of Agricultural Economics at the University of Guelph to co-ordinate agro-economic studies of cassava production that will be undertaken in Brazil, Colombia, Thailand and Nigeria.

#### Brazilian trainees

Two other projects are an outcome of the intensive research done in Colombia on cassava since 1971. One of these is a move to introduce 20 Brazilian professionals, at present working on cassava, to the experimental methods that have been developed at CIAT, so that a network of competent researchers

may be built up in Brazil, where some 86 per cent of all Latin America's cassava is grown. With an IDRC grant of \$28,000 to provide travel funds and lodging expenses and other costs of the 20 trainees, the CIAT cassava team is planning a special four-week training course for the visitors from Brazil to the CIAT headquarters in Cali, Colombia.

Another program is to support with a grant of \$35,000 the experiments of a Peruvian technician, who has completed a year's study of cassava at CIAT, to develop it as a food crop in his own country. At present, Peru produces less than 2 per cent of the cassava grown in Latin America, but Ministry of Agriculture authorities are interested in developing cassava flour as a bread wheat substitute.

A pest known locally as the green spider mite that was accidentally introduced into Uganda and threatening cassava production there, is the subject of another project, for which a grant of \$13,600 is being made to the Commonwealth Institute of Biological Control in Trinidad.

A grant of \$90,000 to the Faculty of Agriculture at the University of Brawijaya in Indonesia will support a research officer and three assistants in a three-year agro-economic evaluation of the "Mukibat" grafting system and to look at its potential in terms of increasing yields in order to produce cassava for both food and industrial uses. The university is contributing staff members to act as supervisors, as well as laboratory space and other facilities.

#### Health study

The final project is concerned with the health implications of Linamarin, one of the cyanogenic glucosides contained in cassava. Endemic goitre is a serious health problem affecting as many as 200 million people, mainly in the developing countries, where the populations most afflicted happen to live in areas where cassava consumption is high. It seems probable that this is more than coincidence, and that Linamarin by interfering with thyroid metabolism plays an important part in causing goitre.

A grant of \$279,575 to the Institut de

Recherche Scientifique en Afrique Centrale (IRSAC) at Lwiro in eastern Zaire, and to the University of Brussels, will finance a three-year study to establish much more precisely the relation between cassava-toxicity in endemic goitre and cretinism, and to assess the effectiveness of iodine prophylaxis on mothers and their children.

The IDRC is a public corporation, created by act of the Canadian Parliament in 1970 to support research designed to adapt science and technology to the specific needs of developing countries. The Centre is unique in that, while it is financed by the Canadian Parliament, it is governed by an international board of governors who independently set its policies and priorities.

### Film director honoured at St. Francis Xavier University

St. Francis Xavier University, Antigonish, Nova Scotia, conferred honorary degrees on a noted Hollywood film director from Glace Bay, N.S. and three distinguished Canadians, at convocation exercises on May 12.

Daniel M. Petrie, director of several motion pictures and television films, Cardinal George Bernard Flahiff, Archbishop of Winnipeg; Emmett M. Hall of Saskatoon, a retired justice of the Supreme Court of Canada; and J. Edward O'Connor, past president of the Calgary Exhibition and Stampede, were the recipients of the doctoral degrees.

The *Los Angeles Times* has described Daniel Petrie, a native of Cape Breton, as "one of today's most prolific and finest directors". Among the films he has directed in the United States and Britain have been *The Bramble Bush*, with Richard Burton, and *Raisin in the Sun*, featuring Sydney Poitier. He has also directed such television series as *Marcus Welby, M.D.*, *Medical Centre*, and *Seaway*, as well as several Broadway productions.

Cardinal Flahiff, a leader of the Catholic Church in Canada, is a participant in the conferences and decisions evolving from the Second Vatican Council. He is a former superior general of the Basilian Fathers, and past president of both the Canadian Religious Conference and the National Conference of Catholic Bishops.