Governor General's party for children

Governor-General Edward Schreyer served as host to 5,000 people, who attended a garden party recently on the grounds of Rideau Hall to celebrate the International Year of the Child.

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Toban, Mr. Schreyer's 4-year-old son helped greet guests to the party, which was open to the public.

The Central Band of the Canadian Armed Forces serenaded guests in one part of the gardens while teenagers listened to a rock band and danced on the lawn. Younger children were entertained by a Punch and Judy puppet show and played in a giant sandbox. Guests consumed some 30,000 sandwiches and 500 gallons of orange juice and tea during the afternoon party.

Awards presented in Montreal

Fashion Canada awards have been presented to Lissa Taylor and Bernard Brodkin at the annual Fashion Canada meeting in Montreal.

Lissa Taylor, recently retired as executive director of Fashion Canada, helped organize the corporation set up in 1970 by the Department of Industry, Trade and Commerce. Mr. Brodkin is president of Brodkin Industries Ltd., Montreal.

She was named fashion personality of the year; he was cited for "meritorious services in the development and recognition of Canadian fashion designers".

Back to basics – farmers fertilize the old-fashioned way

Recycled sewage effluent is an inexpensive source of moisture and nutrients for western Canada's crops, says a scientist at Agriculture Canada's Swift Current, Saskatchewan research station.

Already, eight communities in Saskatchewan are using treated sewage for irrigating fields and another 12 are planning to do so. In Alberta, many rural communities are recycling effluents through agriculture.

"Why ignore such a gold mine of nutrients?" asks Dr. V.O. Biederbeck, who has studied the practice. "Sewage contains nitrogen, phosphate, potash and sulphur as well as a wide range of micro-nutrients including boron, iron, copper and zinc. Most of these minerals are present in both fast-release and slow-release forms, providing a continuing supply of nutrients to the crop."

Research is continuing in two areas of concern – the high salt content of the wastewater and its bacterial quality.

"To prevent excessive accumulation of salts in the soil, more sewage water must be applied to the field than is required for maximum crop production," says Dr. Biederbeck.

Recent studies indicate that only 10 to 15 percent over-irrigation is needed for satisfactory washing out of the salts from the root zone instead of the 25 percent excess application recommended earlier by some U.S. agencies.

Public health authorities have been concerned that the practice of using sewage water on crops might result in contamination when consumed by man or animal.

The research station in Lethbridge, Alberta, has shown, however, that fecal coliforms – the most reliable pollution indicator bacteria – are destroyed by exposure to bright sunlight for ten hours on alfalfa and 50 hours on grass.

"After that time, the crops may be safely harvested or grazed by animals," Dr. Biederbeck says.

"We cannot afford to ignore the wealth of nutrients available for agricultural production near towns and cities through effluent irrigation. In a time when conservation is critical, every possible area where we can save time, energy and resources should be exploited," he says.

Canadian reproduces insulin genes

A Canadian geneticist has developed a revolutionary technique which could lead to the production of synthetic human insulin for use by diabetics.

Dr. Saran Narang of the National Research Council (NRC) in Ottawa has introduced a method for reproducing human insulin genes in the test tube. The genes are then inserted into bacteria, which are programmed to function as microscopic insulin factories.

Some 500,000 Canadian diabetics depend for their lives on animal insulin from the pancreas of swine, sheep and cattle. These animals are the only source of insulin and suppliers are having difficulty meeting demand. The human insulin genes could ensure a sufficient reserve of insulin for diabetics by 1985.

Animal insulin is not ideal for humans because the chemical structure of the protein is slightly different from that produced by the human pancreas, says Dr. Narang. The synthetic genes, on the other hand, have the same structure as human genes, and will command the bacteria to produce molecules of human insulin.

Dr. Narang has already manufactured the three genes necessary to obtain insulin and the introduction of the genes into bacteria cells is expected to begin this summer in NRC's "cloning" laboratory.

Charity drive for milk successful

One year-old Kolin, who has been in an Ottawa hospital since birth, has been blessed with scores of loving mothers who have donated their milk so he can live.

Kolin was born with a bowel obstruction; after surgery his ability to absorb nutrients was restricted.

However, the infant began ingesting human milk six weeks ago after having been fed intravenously since birth. Doctors began feeding Kolin mother's milk because it is the most easily absorbed food.

But as Kolin's need increased, the Children's Hospital of Eastern Ontario, in Ottawa, sent out an urgent request for help *via* newspapers, radio and television.

The hospital has been sending a van around to collect donations and Kolin's father has also been driving to homes to pick up milk.