



**TOL**

*Thai Orchid Lab Co., Ltd.*



”We aim to build a better world through innovation and technology”

- DR. PAIBOOLYA GAVINLERTVATANA, PRESIDENT

## 1 Introduction

TOL is a leading biotechnology company, operating in Thailand as a plant tissue culture laboratory and food manufacturer. For more than 30 years, it has built a name and reputation as a leader in its field, nationally and internationally. It was founded in 1988 (registration no. 4365/2531) by Dr. Paiboolya Gavinlertvatana, Ph.D. in plant tissue culture by the University of Minnesota, USA (1978).

Dr. Paiboolya was professor at Kasetsart University, Thailand, from 1978 to 1986. During his tenure at Kasetsart, he was also advisor to the International Trade Center (ITC); UNCTAD/GATT, Geneva; and the Food and Agricultural Organization (FAO), Bangkok.

In the last few years, TOL has developed a strong interest in cultivation and extraction of Cordyceps fungus, high in bioactive ingredients. After more than three years of research, TOL is currently producing top quality Cordyceps at commercial scale, with consistently high cordycepin levels, aimed at premium applications in the supplements, health, energy drinks, and pharmaceutical industries.

Thanks to its proprietary technology, TOL manages to differentiate itself from the competition and stand alone in its class. From specimen selection, through cloning, cultivating, harvesting, drying, grinding and sanitizing the product, to produce a final Cordyceps powder that is high in bioactive ingredients such as cordycepin, applying the highest standards of hygiene and quality control. TOL's facility is GMP certified and its Cordyceps products have Thai FDA approval.

## 2 History

- 1988 Company foundation. Started product development and marketing opportunities in the orchid tissue culture industry.
- 1989 Expanded its business by establishing a laboratory in Nakhorn Pathom province.
- 1991 Diversified products to ornamental and forestry plants. Start of research and development program for grounding of scientific platform.

- 2006      Opened the second 72,000ft<sup>2</sup>(6,700m<sup>2</sup>) laboratory, focusing on the agricultural and agro-forestry business.
- 2015      Initiated project to research and develop innovative health food products.
- Present    Established a high standard for commercial scale Cordyceps manufacturing. Certified standard through Thai FDA and Codex GMP (cGMP).

### 3 Business Activities

1. Production and supply of excellent quality planting materials, through tissue culture originating from elite selected clones, for export to Asian countries, Europe, Japan, U.S.A. and Central America;
2. Manufacture and supply of top quality, innovative health food and supplements;
3. Provide local and international consultation services in biotechnology and related fields.

### 4 Chairman and Management:

**Police General Chavalit Yodmani**  
Chairman

\* Former Secretary-General, Office of The Narcotic Control Board (N.C.B.), Prime Minister's Office, Bangkok, Thailand.

**Dr. Paiboolya Gavinlertvatana, Ph.D.**  
President

**Ms. Natthanan Chanthanuraksa, M.Sc. (Agriculture)**  
Laboratory and Research Manager

**Ms. Napa Gavinlertvatan, M.Sc. (Industrial Engineering)**  
Business Development Manager

**Ms. Ravisara Plengmuankhae, B.A. (Business English)**  
International Marketing Executive

**Mr. Kukiatt Chaiwan, M.B.A.**  
Accountant

**Ms. Wanwisa Chanthanuraksa, B.A. (Finance)**  
Finance Controller

### 5 TOL's Facilities

TOL has a laboratory area of 72,000ft<sup>2</sup>(6,700m<sup>2</sup>) and an operating area of 27,000ft<sup>2</sup>(2,500m<sup>2</sup>).

The laboratory facilities are:

- ✿ 2 laboratory buildings;
- ✿ 4 transfer rooms;
- ✿ 10 incubating rooms;
- ✿ Drying room;
- ✿ Packing area;
- ✿ Controlled environment storage room.