

CHAPTER VI

SUMMARY AND SUGGESTION

6.1 Summary

The Production and Export of Thai Orchids and their Constraints

The main export genus of Thai orchids are *Dendrobium*, *Vanda*, *Oncidium*, *Cattleya*, *Phalaenopsis*, *Ascocenda*, *Rhyncostylis*, *Mokara*, *Aranda* and *Cymbidium*. *Dendrobium spp.* are the highest export values to the world markets. The major-planted areas of Thai orchids were in Bangkok, Nakhon Prathom, and Samuth Sakorn with 4,488, 4,145, and 2,912 rai in 1996, respectively.

The orchid growers in Suan Sam Pran, Nakorn Prathom province had grown the orchids for domestic markets (about 10-40 %) and for the export companies (60-90 %) since 1977-1988. The production constrains in growing orchids were high fixed costs (nursery and seedling), insects and diseases problems and the other was that Thai orchid selling prices to the export companies were not different from the domestic markets. In order to reduce production costs and eliminate some problems, they wanted the government to reduce the chemicals and insecticides prices and suggested for setting environmental control policy in water pollution. The highly seasonal farm prices of Thai orchids usually occurred during the year such as high orchid prices in dry season (March to May) and low orchid prices in rainy season (June to October).

The growth rates of Thai orchid export values tended to increase every year from 4.31 million baht in 1970 to 744.68 million baht in 1997. The supporting factors of the increasing export values were the customer country numbers increased from 21 countries in 1970 to 86 countries in 1997. The numbers of exporters had grown from 56 companies in 1992 to 225 companies in 1996.

The major factors affecting Thai orchid exports were both inside and outside the country. The internal factors were quantities of Thai orchid produce in each year, transportation, qualities, numbers of export companies, and prices. The external

factors were the numbers of competitive countries, orchid prices of the competitive country, seasonality, and substituted flower prices in customer countries.

Thai Orchid Exports in Japanese, Italian and American Markets

Japanese, Italian and American markets are the first, the second and the third largest importing countries of Thai orchids in 1981-1997, 1985-1997 and 1970-1997, respectively.

In Japanese market, the Netherlands and Thailand were rank as the first and the second exporting countries into Japan with the export shares about 28.3-35.9 % and 18.9-21.6 %, respectively, from 1993-1997. Market shares of Thai orchids and the Netherlands tended to decrease but the other countries tended to increase as well as the total import values of Japan tended to increase in 1993-1995 and decrease in 1996.

There were two major exporting countries of orchid flowers into Italian market, Thailand and the Netherlands, but both of them had the decreasing growth rates in this market from 1992-1997. These may due to the several new coming countries of orchid exports to Italian market such as Colombia, Zimbabwe, Ecuador, Hong Kong, and the increasing market shares of some exporting countries (South Africa and Mauritius) but there were only a small market shares of these countries. The decreasing growth rates of Thai orchid exports in this market may cause from other factors (phytosanitary and regulations of Italy, about insects and diseases).

The highest market shares of Thai orchids were about 78.51-83.02 % of the total orchid import values of America from 1993-1997. Growth rates of Thai orchid exports to American market increased about 2.40 %, 3.48 % and decreased 8.02 %, 9.56 % in 1994, 1995 and 1996, 1997, respectively, the same growth rates direction as the total orchid import values of America. The market shares of the three main competitive exporting countries (the Netherlands, New Zealand and Costa Rica) and the new several exporting countries (Dominican Rep., Peru, India and Israel) of orchid flower in American market were less than 10 % and only a small market shares, respectively, in 1993-1997. From these, numbers and market shares of exporting countries for orchid exports may not affect growth rates, instabilities and market shares of Thai orchid exports in American market in 1993-1997.

Instability of Thai Orchid Exports in the world, Japanese, Italian and American Markets

The results of instability indexes of Thai orchid exports to the world and these three main countries by the statistical analysis of 5 years moving in the world, Italian and American (1970-1974, 1971-1975, ..., 1993-1997) and Japanese markets (1974-1978, 1975-1979, ..., 1993-1997), showed as follows.

The results of instability indexes of Thai orchid exports in the world markets were between 4.99 in 1986 to 39.42 in 1976. The actual export values fluctuated from the trend export values between 1.67 in 1988 to 141.14 in 1980. The highest absolutely changed from the trend export value (fluctuation) was in 1980. In 1985 and 1988 the actual export values were similar to the trend export values into the world markets, with 1.50 and 0.32 % different between actual trend respectively. The actual export values were less than the trend exports values or quite the same values of trend exports from 1972-1984, except in 1979-1981. This caused the high values of instability indexes of Thai orchid exports to the world markets (more than 27 % in 1975-1983, except 17.92 % in 1984). Later in 1985-1997, the instability indexes were less than 10.15 % that was very stable for Thai orchid exports to the world markets.

In Japanese market, the results of instability indexes of Thai orchid exports to Japan from 1978-1997 were between -18.89 in 1978 (the lowest instability) to 25.78 in 1986 (the highest instability) of Thai orchid exports to Japan. The percentage of stability indexes could get from 100 minus from the values of instability indexes. From 1977-1997, the actual exports were lower than the trend values every year, except in 1979, 1981 and 1991-1995. The actual export values had the least fluctuation from the trend export values about 0.69 in 1981 and the highest fluctuation about 89.19 million baht in 1993.

From 1974-1997, the instability indexes of Thai orchid exports to Italian market were between -21.07 in 1974 to 97.07 in 1977. The absolutely fluctuation of the actual export values from the trend export values were between 0.10 in 1982 to 17.59 in 1992. The actual export values of Thai orchids to Italy were less than the trend export values from 1973-1980. From 1981 - 1994, the actual export values were higher than the trend export values (except in 1983 and 1986-1987), the growth rates

of Thai orchid exports to Italy in this period tended to increase every year. The instability indexes were low (more stable) since 1983 which were less than 19.61 %.

The instability indexes of Thai orchid exports to the United States of America were between 95.50 in 1979 to -100.23 % in 1974. The actual export values were less than the trend export values from 1975-1987 but later the actual export values were more than the trend export values from 1988-1997, except in 1989 and 1996. The instability indexes of Thai orchid exports into American market were low since 1991 about 7.04 to 11.54 %. That was very stable in this period.

Thai orchid exports were stable in Japanese market (stability indexes were more than 74 % from 1981-1997) and the stability indexes were more than 85 % in Italian and American markets since 1991.

Market Concentration Indexes and the Relationships

The market concentration indexes (Herfindahl method) were between 0.1572-0.2077 in 1993-1997, 0.4600-0.7721 in 1992-1997 and 0.6257-0.0.6964 in 1993-1997 in Japanese, Italian and American markets, respectively. The regression analysis of the relationships between Thai orchid growth rates and market concentration indexes of these 3 countries showed that there was no significant relationship between these two factors from 1993-1997. This indicated that the Thai orchid exports to these 3 markets could increase independently and not depend on numbers and market shares of exporting countries.

The instability indexes had positive relationship with concentration indexes but negative relatively with growth rates and Thai market shares in Japanese market. The instability indexes were not correlated with concentration indexes in Italian market. However, there was significant and negative relationship between market concentration indexes and instability indexes of orchid flowers in American market.

Market shares of Thai orchid exports were significant and positively related to market concentration indexes of Italy and USA..

Growth Rates and Export Prices of Thai Orchids

The results showed that the growth rates of Thai orchid exports into Japanese, Italian and American markets tended to increase every year from 1970-

1997. The export prices tended to increase in Japanese market, but decrease in Italian and American markets from 1970-1997. The export prices of Thai orchids in Italian and American markets compared to the main competitive countries such as the Netherlands, New Zealand and Singapore, Thai orchid prices (both of *Dendrobium spp.* and other genus and species) were much lower than those of the major competitive countries in 1993-1997.

6.2 Suggestion

The results of this study showed that growth rates of Thai orchid exports tended to increase, Thai orchid growers and exporters should maintain increasing growth rates as well as increasing market shares and exports stability. Due to the fact that growth rates of Thai orchid exports in these 3 countries can increase independently not depend on the numbers and the amount of export values of the exporting countries. The remarkable information of Thai orchid exports in these 3 countries was as follows.

In Japanese market, instability of Thai orchid exports depended on growth rates, market shares and the numbers and export shares of the exporting countries and Thai orchids in this market had relatively small shares. In Italian market, the instability of Thai orchid exports was less significant negative relationship with market concentration of Italy, this finding result implied that with market shares less than 60 %, the export instability might be significantly affected by market concentration in the importing countries. In order to improve export stability it is essential to raise market shares at least up to the level prevail in Italian market. Even Thai orchid export shares were the highest values in the American market and Thai orchid export were stable since 1991, but the export instability were significantly correlated with market concentration indexes of America. So, numbers and amount of export values of the exporting countries in American market could affect the market shares and instability of Thai orchid exports.

For Thai orchid export prices had not been increased, this due to the price-cutting among the Thai orchid export companies, from the Thai orchid exporter survey.

Some suggestions of this study for the future research

In order to increase, maintain and develop diverse market shares of Thai orchids in Japanese, Italian and American markets in the future, the export companies and the involving government officers should study or do the researches by developing high quality *Dendrobium spp.*. The cross breeding of new high value orchids and high production / rai with low costs of production. The study on the behavior of the customers in addition to advertising, the most characteristics of Thai orchids, in order to satisfy consumer requirements in these markets.