

## The results of Gynura Procumbens products consumption in the sports training practice.

This research was carried out by me, Filonis Ellinidi, 31 g, athlete, power lifter. Height 180 cm, weight - 120 kg, Limassol, Cyprus.

Sports practice - 15 years, participant in bodybuilding competitions and prize winner in powerlifting competitions.

### Introduction.

Currently, vitamin-mineral complexes are used to compensate for vitamin-mineral deficiency in the body of athletes.

At the same time, they are inferior to natural ones, since a synthetic product is always a simple chemical substance, and a natural product is a composition of complex substances, presented in an organic form, which is convenient for its digestion by the human body.

Although synthetic vitamins and minerals have produced satisfactory results in their use, the benefits of the natural products are much higher at many levels. The chemical composition of both products may seem similar, but the quality and effectiveness of their action are significantly different.

**Gynura Procumbens** from the aster family is included in many national reference books of medicinal plants. Originating from the Mediterranean coast of African continent many centuries ago, the plant successfully migrated to South-East Asia, where the eastern healers appreciated it.

It was used simply as food and at the same time as a remedy for many diseases. For the past 15 years, the plant has attracted the attention of the international scientific community as a source of many powerful biologically active components, including flavonoids, carotenoids, alkaloids and essential oils.

The results of studies conducted by scientists from Malaysia, Indonesia, China, Thailand, Singapore, South Korea and Japan, did confirm a number of therapeutic effects of the plant.

The widespread use of Gynura as a food product in Southeast Asia and other regions allows to study the effects of this plant, when it is introduced into the diet in a various forms of tea.

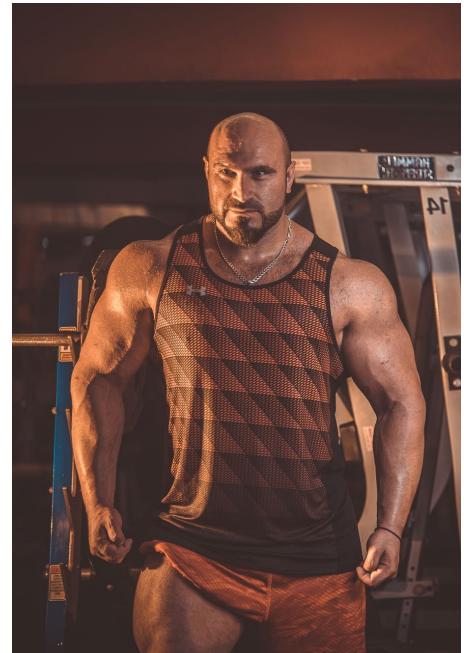
With regard to sports practice, the following valuable properties of the Gynura has been found from the scientific literature:

- Blood and lymph microcirculation improvement;
- Decrease of tissue hypoxia;
- Improvement of carbohydrate, protein and lipid metabolism.

The acquaintance with those materials became the reason for the present study.

The purpose of this study is to verify the action and evaluate the effectiveness of Gynura products consumption in sports training practice.

**Materials and methods.** Studies were conducted in the ANAPLASIS sports complex, Limassol, Cyprus.



The following products has been used:

1. Tea from dried Gynura leaves, loose, packed in sachets (1.5 g) and capsulized ( 0.4 g);
2. Beverage with Gynura extract, pomegranate juice and black currant, sweetened by stevia (Gynura Iced Tea, 500 ml).

The evaluating parameter is lactate dehydrogenase.

The measurements were made by device Accutrend Plus, Roche, Germany.

The study was conducted for 5 training days.

Consumption of products was carried out according to the following schedule:

1. Two capsules of 0.4 g tea in one hour before the training;
2. 250 ml of hot tea, brewed according to the manufacturer's instructions in 30 minutes before the training;
3. 500 ml of a Gynura Iced Tea during the training.

As a control measurement, the level of lactate was measured in the usual training regime, without the consumption of Gynura products.

Before the training, the lactate level was 1.9 -2.0 mmol / l, after training it rose to 7.5 - 8.0 mmol / l.

After the consumption Gynura products according to the above-mentioned schedule, the lactate level after training was 1.7 -1.8 mmol / l and lower.

In two cases the level was lower than the lowest device calibration limit.

In addition to such a significant decrease of the lactate level, there was a slight cheerfulness, the process of recovery after the training was accelerated.

**Conclusion.** As a competing sportsman, I believe that the most important matters in sports training are the recovery and a good cheerful mood for workout.

According to my subjective opinion, Gynura products do have these properties.

Filonis Ellinidi



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