Master's thesis on the topic of planning and performance testing in the Thai boxing is focused on technical and mainly physical parameters in the practice of this discipline, when passed from the martial arts sport to popular performance sport and quality of sports training is often more important than mere technical readiness. The aim of the thesis is to compose detailed guidance for the perfect physical, tactical and psychological preparation of athletes performing this full-contact sport. In the introduction it focuses on the history of origin of martial arts, especially the Thai boxing. Furthermore, introduces the beginnings of the using of martial arts as sports tilt and beginnings of this sport in the Czech republic.

The main part of the thesis describes the impact of training methods and different types of physical aparratus load during the four mesocycles within one annual training period and the question of training management. For the purpose of the training plan has been realized year observation of MUAY THAI sports club in MLADA BOLESLAV. Surveillance was focused on physical, tactical and psychological preparation of the members of the club.

The Essentials contribution of this work is the creation of pilot testing battery for measuring the physical performance of athletes engaged in Thai boxing. Athletes performing Thai box are called fighters or boxers at work. To find out all the detailed information were used controlled interviews with leading Czech coaches, search of special literature and internet servers.

Keywords: Thai box, Muay thai, sports training, physical fitness, technique, tactics, psychological preparation, training plan, pilot testing battery