Warning coloration is used by prey to signal its unprofitability to potential predators. Warning colours may have different effects on various cognitive processes of predators (innate avoidance, avoidance learning, memory and generalization). Typical colours regarded as aposematic are red, orange and yellow. Red colour is considered to be the most effective signal and has a significant effect on avoidance learning, memory and generalization. Orange also represents an effective warning signal, though it has been studied less. Yellow is effective aposematic stimulus but it has frequently been found less effective compared to red and orange. Warning functions of white, blue, violet and ultraviolet colours were studied less frequently and their role in aposematism is not yet clear. Iridescent coloration might also be an effective warning signal affecting avoidance learning, memory and generalization. In this thesis I present a summary of information with regard to different warning colours and their effect on cognitive processes of predators.

Key words: aposematism, warning coloration, cognitive processes, red, orange, yellow, iridescence, avoidance learning, innate avoidance, memory, generalization