ULTRASONOGRAPHY IN BEARDED DRAGONS, *Pogona* spp.

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**ABSTRACT:** Ultrasonography and radiography were performed in bearded dragons living in Germany. Bearded dragons (*Pogona species*) with a minimal body weight of 100 grams were examined. The aim of the study was improvement and standardization of diagnostic imaging techniques. Therefore 42 bearded dragons were examined by means of ultrasound and radiography. Animals used in this study were provided by private owners or zoological gardens as clients. All patients appeared to be clinical healthy, blood values ranged within normal ranges. Nineteen males and 23 females regardless of age or reproduction status were investigated. Ultrasound was performed with a 14-mHz linear array transducer. Animals were held in an upright position and were examined according to a standardized protocol.

Liver, including gallbladder and vena cava, fat bodies, gastrointestinal tract, reproductive tract (ovaries or testes), and kidneys could be regularly observed and defined by sonography. Precise demonstration of the heart, which is surrounded by bony structures, especially sternum, was not possible in most cases in this study, probably because of its anatomic location and applied ultrasound probes. All other structures mentioned above could be located and illustrated by ultrasonography. Physiologic appearance of different coelomic organs by means of ultrasound, including variations in size and localization within the coelomic cavity will be visualized within the talk. Comparison of radiography and ultrasonography revealed that evaluation of most organs, except lungs, skeletal system, and heavy ingesta- or gas-loaded intestines, was rendered more precisely by ultrasonography. Gallbladder, testes, and kidneys could only be defined by means of ultrasound.

**KEY WORDS:** reptile, diagnostic imaging, ultrasound, lizard, bearded dragon, *Pogona*