Using the Microwaves to create ICISS as Method for Completely Extracting the Terrestrial Snail's Flesh out of Shell (Cornu aspersum and Helix pomatia) while Inhibiting Animal's Nervous System to Reduce Pain

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SUMMARY

A novel method it was conceived as to quickly inhibit snails' nervous system in order to reduce pain and suffering and to facilitate the complete meat removal from the shell, Fig.1.

The snails have been introduced into a microwave oven Vortex R, model WD800L20-8, capable to generate 800W of microwave power at 2450 MHz frequency. Using the oven set on medium by trial and error the optimum times for snails' slaughter was found (Fig. 2).

The snails' nervous system is being inhibited within the first 2-3 seconds of exposure to microwave, as they did not respond to tactile touches using sharp needles. The nervous system is being affected by the change in temperature as well by the non-thermal effects, also states in their work Orendacova *et al.*, (2007).

The novel procedure shows a complete separation of the meat from the shell's internal surface (Fig. 1) within the experimentally determined necessary times as seen in *Figure 2*, dependent upon the weight of the exposed content to radiation.

The Intimate Contact Induced Surface Separation (ICISS) is produced by the proper microwave radiation energy.

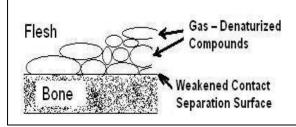


Fig. 1. Microwave's ICISS - structure separation

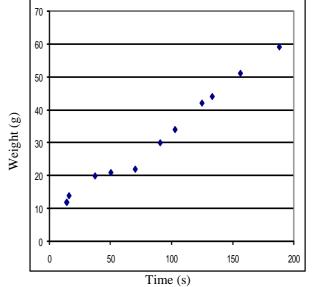


Fig. 2. Time exposure to microwave radiation

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