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The Inhibitory Effect of Forest Honey on Staphylococci Isolated From Wounds in Animals

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SUMMARY

After determining the antibacterial effect of four varieties of honey harvested in northwestern Transylvania tested on six species of staphylococci using the diffusimetrical method, was observed that forest honey had good inhibitory effect, both used as such and after dilution with distilled water.

Following determination of minimum inhibitory concentration (MIC) using nutrient broth dilution method, was observed that forest honey produced inhibition of development for the species *S. intermedius* and *S. chromogenes* also for the final dillution of 1/64, coresponding to a concentration of 1.5% honey. *S. xilosus* was inhibited up to the dillution of 1/16 coresponding to a concentration of 5.5%. *S. hominis* and *S. sciuri* were inhibited up to the dillution of ¼, representing a concentration of 25%. *S. aureus* strain in liquid medium was inhibited only by the concentration of 50% forest honey in the sample (Table 1).

Staphylococcus species	Dilutions				
	1/1(50%)	1/4(25%)	1/16(5.5%)	1/32(3%)	1/64(1.5%)
S. aureus	+	-	-	-	-
S. intermedius	+	+	+	+	+
S. xilosus	+	+	+	-	-
S. hominis	+	+	-	-	-
S. chromogenes	+	+	+	+	+
S. sciuri	+	+	-	-	-

+ Tubes in which there was no bacterial growth

Table 1. Determination of M.I.C. for staphylococci by the dilutions method with forest honey

Considering the results, and that most of the bacterial species tested were resistant to antibiotics, the present study fully justifies its purpose because it was found that the antibacterial effect of forest honey is similar or even better in case of Staphylococci than some antibiotics. This may consider the use of forest honey in bacterial diseases, particularly those caused by germs like *Staphylococcus.*