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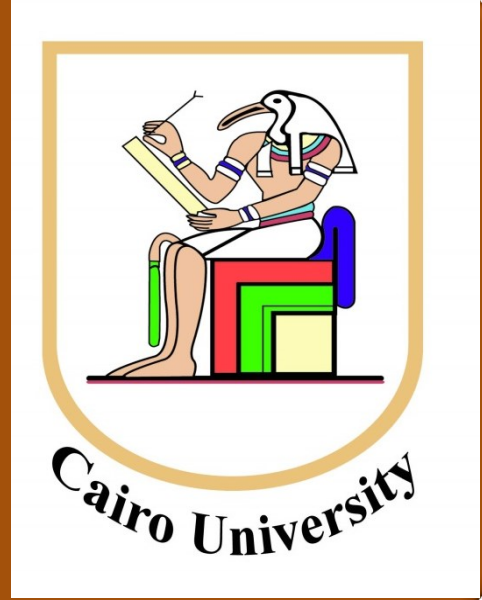
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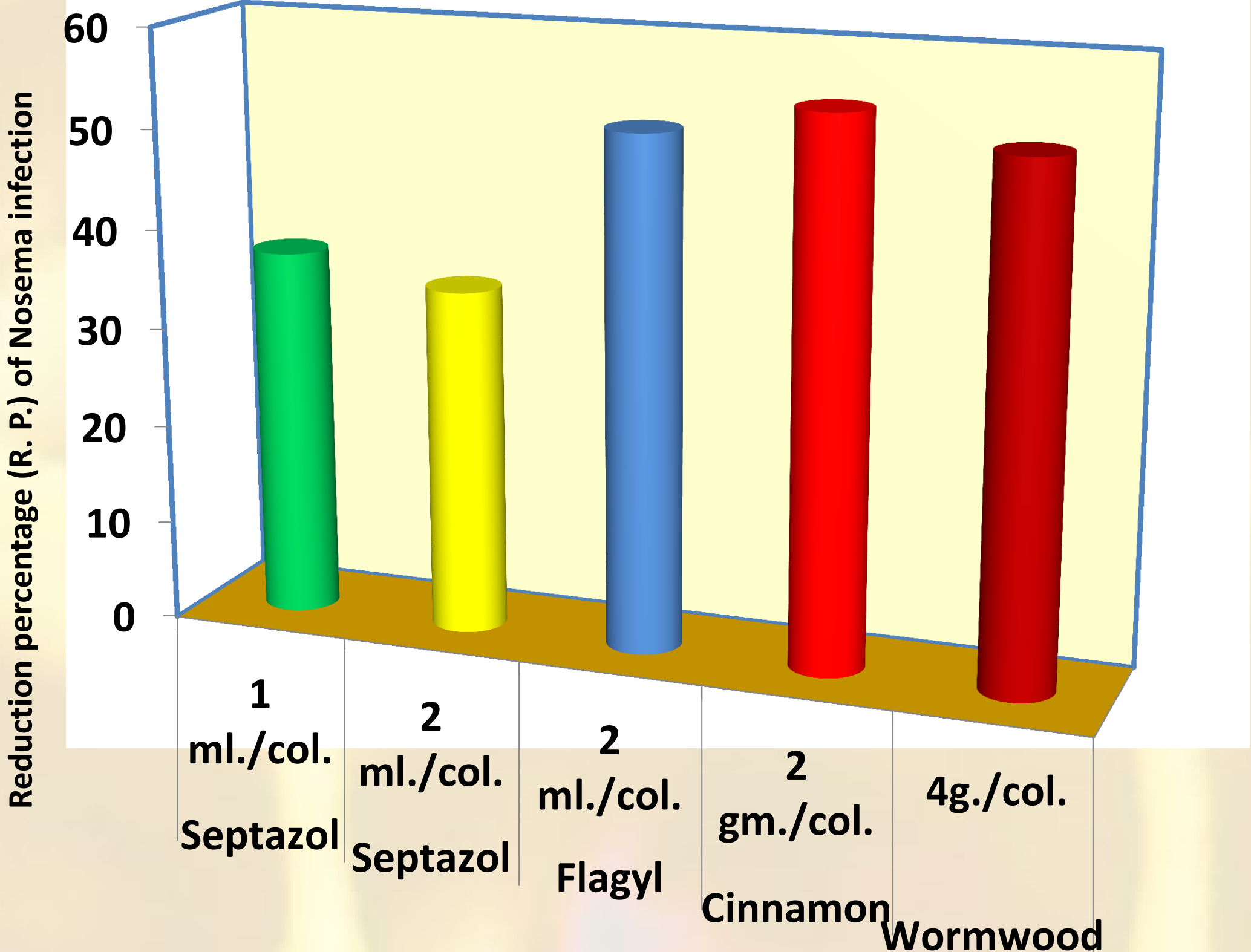


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Until the end of last century the nosema diseases in honeybees is known to be caused by parasitic infection with *Nosema apis* Z., whereas the last scientific researches in many countries indicated that the most dominance in the world is *Nosema ceranae* (Martin- Hernandez et al., 2011; Stevanovic et al., 2011 and Medici et al., 2012). Also El-shemy et al., (2012) detected *Nosema ceranae* in Egypt. The most successful agent used so far in *Nosema* control is fumagillin ; marketed under the trade name, Fumidil B (Katzenelson & Jamieson, 1952). On the other hand some researchers used the natural products to avoid the side effect of the mentioned chemicals (Bogdan et al. 1986 and Refaei, 2005) used volatile oils and El-Shemy et al., 199 successfully controlled the *Nosema* diseases by the water extract of wormwood.

The second experiment



Fig(2): Reduction percentage (R. P.) of *Nosema* infection level in honeybee colonies after treatment with some materials (5 doses) during April, 2011

CONCLUSION

All tested materials are effective in limiting the severity of *Nosema* diseases during the period of maximum infection in early spring but not cure completely the colonies. The tested materials may affect the development of the parasite within the epithelium of the ventricles and the resting spores are not affected. The statistical analysis of data showed that no significant differences were found between the mentioned treatments, whereas all the tested materials showed significant differences comparing with control colonies. The general conclusion of the control study showed that both of wormwood and Cinnamon extraction are effective in controlling *Nosema* diseases comparing with the other antibiotics (Tylosin , Flagyl and septazole). However, more studies have to be conducted on the mode of action of these extractions and the appropriate concentration and number of applications which must be used to achieve the best result.

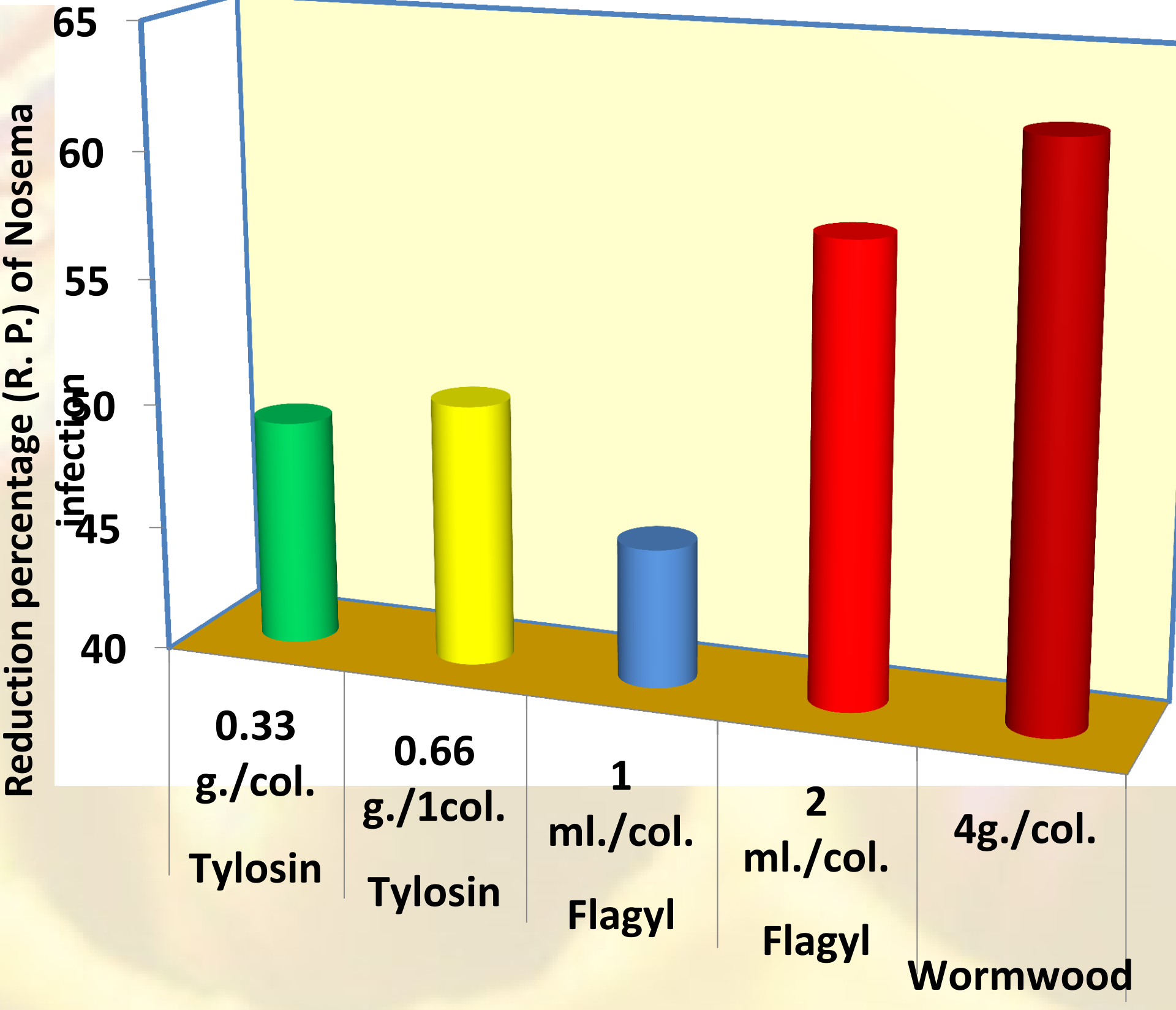
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RESULTS



Fig(1): Reduction percentage (R. P.) of *Nosema* infection level in honeybee colonies after treatment with some materials (5 doses) during April, 2011

Materials and Methods

The First experiment

