8. CONCLUSION

In nutshell, our investigation reveals following important inferences -

1. We have confirmed iron chelating activity of wheatgrass and its various extracts.
2. We have isolated, purified and characterized a potential iron chelating compound from wheatgrass. The chelating power of the compound was found to be 34.5% compared to desferroxamine.
3. The mechanism of iron chelating activity of wheatgrass seems to be the increase in excretion of iron through urine as well as faeces and that the chelate complexation process with iron is reversible.
4. Data of our study indicate that wheatgrass improves overall blood picture in iron overloaded patients by increasing Hb, RBC, WBC and platelet counts.
5. Our data suggest that wheatgrass protects vital organs like liver, kidney and heart in iron over load conditions like thalassemia.
6. The results of our study indicate strengthening of antioxidant defense of body by wheatgrass in iron overload condition.
7. Our data indicate potential beneficial effect of wheatgrass in thrombocytopenia.
8. Our results indicate that wheatgrass possesses immunomodulatory activity through stimulation of reticuloendothelial system and cell mediated immunity.