Inhibition Reactions of Ten Nonspecific Seed Extracts and Their Conservation into Group Specific Lectins

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ABSTRACT Inhibition reactions of 10 nonspecific lectins have been examined using a panel of 22 simple and derivative sugars. The results of haemagglutination inhibition reactions suggest that all ten extracts, which apparently behave as nonspecific lectins, in fact, are highly specific with respect to the binding of saccharides. They possess multiple binding sites and could be converted into blood group specific lectins in the presence of certain inhibiting sugar(s). Six seed extracts namely Terminalia bellirica, Terminalia citrine, Eucalyptus staigriana, Ficus infectoria, Morusalba and Vigna catjang after partial inhibition with certain carbohydrates, behaved like anti-(A+B). There lectins (Cassia siamea, Trichosanthus anguina, Ficus infectoria) could be converted into anti-(A+H) specific and one (Acalypha indica) into anti-(B+H). One lectin each could be converted into anti-A (Ficus infectoria) and anti-H (Trichosanthus anguina). While two lectins (Eugienia jambolana, Terminalia bellirica) could be converted into anti-B specific reagents after treatment with appropriate inhibiting sugars.