

This text details the constituents and uses of various seeds (*Nigella sativa*, castor, coffee, colchicum, horse chestnut, pumpkin, and evening primrose), followed by a description of fruit types and their diagnostic features. Key seed constituents include alkaloids (e.g., caffeine, colchicine, ricinine), fatty acids (omega-3, omega-6, GLA), and other compounds like thymoquinone and saponins. Uses range from immunostimulant and anti-inflammatory properties to laxative and cytotoxic effects. Fruit types are categorized as true, false, dehiscent, and schizocarpic, based on their development and seed dispersal mechanisms. Diagnostic features of fruit layers (epicarp, mesocarp, endocarp) are described, highlighting characteristics like cuticle type, presence of hairs, vascular bundle arrangement, and crystal formations for identification purposes.