BACKGROUND AND OBJECTIVE: Allergic skin and respiratory diseases show a high prevalence in most industrial countries. In addition, during the last years ragweed colonization has increased in Europe. Ambrosia pollen (AMBROSIA ARTEMISIIFOLIA L., common ragweed) are highly allergenic. Due to the late flowering time (August/September) of ragweed this can result in increasing health threats for allergic populations. This is of particular importance for those who already are sensitive to some grass or tree pollen. These individuals can then suffer from allergies during nearly the whole year. The present study examined the prevalence of sensitization to ragweed in German children and possible health implications. METHODS: Between 2004 and 2007 sera of 1323 10-years old children in Baden Württemberg were tested in-vitro for specific IgE-antibodies against common aeroallergens including ragweed pollen. RESULTS: Specific IgE-antibodies to extracts of common ragweed pollen were present in 10 - 17 % of the tested sera depending on the year of investigation. CONCLUSION: The determined specific IgE-antibodies may be the result of a direct sensitization to ragweed pollen or correspond to cross-reactivity to other plants of the asteraceae subfamily or some nutritional allergens. The detection of
sensitization to ragweed pollen does not prove actual allergic disease. However, a ragweed derived allergy should be considered in the differential diagnosis when allergic symptoms are present in direct connection to the flowering-time of ragweed. Ragweed plants should be removed and the spread of the plant 'restricted', as experiences in other countries with already wide spreading show.