

Title Moulds and yeasts in fresh and minimally processed vegetables, and sprouts  
Author V.H. Tournas  
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### Abstract

A limited survey of fresh and minimally processed vegetables, and sprouts was conducted in the Washington, DC area to determine if potentially toxigenic and pathogenic fungi were present in these commodities. Thirty-nine ready-to-eat salads, 29 whole fresh vegetables and 116 sprout samples (bean, alfalfa, broccoli, crunchy, garlic, spicy, onion, clover, lentil and multi-seed sprouts) were purchased from 13 local supermarkets and tested for yeast and mould counts as well as the presence of toxigenic moulds. Yeasts were the most prevalent organisms found in these samples, at levels ranging from less than 100 to  $4.0 \times 10^8$  cfu/g. Mould counts generally ranged from less than 100 to  $4.0 \times 10^4$  cfu/g. Two crunchy sprout samples, however, contained unusually high numbers of *Penicillium* ( $1.1 \times 10^8$  and  $1.3 \times 10^8$  cfu/g), two alfalfa sprout samples contained *Geotrichum* populations about  $10^6$  cfu/g, and two alfalfa sprout samples had *Cladosporium* counts higher than  $2.5 \times 10^5$  cfu/g. The most common moulds found in fresh and minimally processed vegetables were *Cladosporium*, *Alternaria* and *Penicillium*; less common was *Geotrichum*. The most frequently isolated moulds from sprouts were *Alternaria*, *Cladosporium*, *Penicillium*, and *Phoma*. *Phoma* was especially common in alfalfa sprouts. *Fusarium*, *Rhizopus*, *Mucor*, and *Geotrichum* were isolated less often.