

INVOLVEMENT OF SOME FUNGI IN IMMATURE
FRUIT ROT OF CASHEW (*ANACARDIUM
OCCIDENTALE* L.)

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ABSTRACT

Immature fruit drop, a severe problem in cashew, is so far considered to be only physiological and entomological. During our survey, we noticed some fungi growing on the young nuts and causing dry rot. These 5 species of fungi were identified as *Aspergillus* spp. (2), *Penicillium* spp. (1), *Colletotrichum* sp. (1) and *Trichosporiella* sp. Pathogenicity was tested and confirmed both *in vivo* and *in vitro*. The details of further studies will be reported soon.

Immature fruit drop in cashew is so far considered to be physiological (Northwood, 1977) and entomological (Sathiamma, 1977). During our study on the phenomenon of fruit drop, we noticed the infection of developing cashewnuts, especially the early stages (i.e. during the 7-20 days after fertilization) by fungi. The fungi associated were identified as the species of *Aspergillus* (2 spp.) *Colletotrichum* (1 sp.) *Penicillium* (1 sp.) and *Trichosporiella* (?). These fungi were observed to cause the rot of the immature nuts which dry and drop off later. This was confirmed by field and laboratory inoculation studies. Though these fungi could infect the late stages of the nuts, dry rot of such nuts was not caused. Similar dry rot of immature cashew nuts was reported from Nigeria (Olunloyo, 1978). *Aspergillus tamari*, *Penicillium citrium* and *Lasiodiplodia theobromae* were reported to be associated with this infection.

The infection was noticed at the stylar base of the young ovary, where some sugary exudates would be available for the growth of the fungus. Ants which feed on these exudates may be involved in the spread of these fungi. Laboratory inoculation studies with these ants gave an indication of their involvement.

Detailed studies are in progress and will be reported elsewhere.

REFERENCES

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