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## *The Role of Phytohormones in Heat Stress Tolerance in Plants*

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### 10.1 Introduction

During the nineteenth century, rice seedlings were found to be tainted with the parasite *Gibberella fujikuroi* in advanced development. This upgraded development gave its name to the ailment, ‘bakanae’ (absurd seedling) sickness of rice. Afterwards, the compound answerable for this phenotype was named after the microorganism, gibberellin (GA). Other plant sicknesses are regularly connected with either hindering or upgraded development and tumours, which drove scientists at the time to presume irritated hormone levels in these tissues. Biochemical methods permitted the confinement of development hormones, for example, auxin and cytokinin from both microscopic organisms and parasites. Regardless of proof of a tight connection between plant development hormones and infection, scarcely any reports illustrated the role of those hormones in plant-microbe cooperation.

Rather, protection-related flagging atoms, for example, SA, JA, and ET have gotten a lot of consideration, and their significance in plant destruction is currently very much recorded. Late subatomic and articulation profiling methods permit ‘- omics’ approaches and have given new insights about potential roles of hormones in plant/microorganism collaborations. Here, we centre around late reports on the