Grade 10 Science Inquiry Project – Example

The EXAMPLE rows below are to model strong evidence-based research.

Section	Checklist Item	Evidence (Completed Example)	Case Study / Graphic	Source (APA style later)
EXAMPLE – Benefits	☑ GM papaya resists disease and increases yield	• GM Rainbow papaya contains a gene from the papaya ringspot virus (PRSV) coat protein, which acts like a vaccine and prevents infection. • Field trials showed GM papaya produced about 125,000 pounds per acre per year, compared to about 5,000 pounds from non-GM papaya infected with PRSV. • After approval in 1998, GM papaya quickly made up over 50% of Hawaii's papaya crop and later over 90%, preventing collapse of the industry.	• Case study: Hawaii Rainbow Papaya • Before/after production graph showing recovery after 1998	Gonsalves et al., 2004; IFIC, 2016
EXAMPLE – Case Study	☑ Scientists study genetic changes in animals	• During the 1990s, scientists documented frogs with missing or extra limbs in Minnesota and other areas. • Research showed deformities occurred during early development when genes controlling limb growth were disrupted. • Studies identified environmental factors (parasites, pollutants) that interfered with normal gene expression during tadpole development.	• Case study: "Fred the Frog" – frog born with 3 legs • Photo of limb deformity • Diagram of frog limb development	USGS, 2022; PARC, 2022