Nx Farmer Guide: Indices, Produce Profiles & Field Use

Purpose of Nx in the Field

Nx is a comparative field tool designed to help farmers observe differences in produce related to soil condition, variety, ripeness, harvest timing, and storage. It supports observation and trend tracking rather than single-point judgement.

Independent Indices

SCI (Sweetness-related Index)
Sensitive to sweetness-related, soluble characteristics influenced by variety, maturity, and growing conditions.

NDI (Density-related Index)
Sensitive to structure-, solidity-, and density-related characteristics influenced by soil, plant health, and harvest timing.

Key Principles

• SCI and NDI are independent and not opposites.
• Neither index is intrinsically better than the other.
• Interpretation depends on produce type and variety.

Interpreting SCI Relative to NDI

SCI higher than NDI indicates sweetness-dominant composition. This is normal for many fruits and certain varieties. Interpretation should be comparative and longitudinal, not absolute.

Produce Profiles

Considering SCI and NDI together allows produce to be described using profiles rather than fixed targets.

• Density-leaning: structural characteristics dominate
• Sweet-leaning: sweetness-related characteristics dominate
• Low overall signals: often immature, stressed, or long-stored produce
• High overall signals: concentrated, well-developed produce

Recommended Field Use

• Compare within the same variety and harvest window
• Repeat measurements to confirm consistency
• Track trends over time rather than relying on single readings
• Use Nx alongside agronomic knowledge and observation

Nx is a comparative tool intended to support field observation. It does not replace laboratory analysis or agronomic advice.