Comparison Criteria	Growor Technology	Vertical Farm	Advanced GH	Greenhouse
Yield per m² per cycle (kg)	250	NA	NA	NA
Yield per m² per year (kg)	2000	150-350	80-120	7-25
Yield per hectare per year (tons)	20000	NA	700-1200	100-200
Cost per kg ($)	0.9	9.5	1.5	0.9
Water consumption (L/kg)	5	20-50	50-60	100
Electricity consumption (kWh/kg)	3.2	NA	40	1.5
Pesticides / Chemicals	None	Partially use	Present	Present
Shelf life (weeks)	4+	2+	2	1,5
Fruit uniformity	100% identical fruits	Selection required	Non-uniform	Highly variable
Microelement control	Yes, fully adjustable	Limited	Limited	No
Seedling growth time (days)	14	21-28	25-35	30+
Time to fruiting (days)	30-45	50-60	55-85	60-90
Chemical treatments required	Not required	Partially required	Required	Mandatory
Year-round production	Yes	Yes	Partial	Limited by season
Climate dependency	No	No	Moderate	Yes
Adaptability to varieties	Yes, all varieties	Not all varieties	Needs adaptation	Requires selection
Plant density (plants/m²)	280	NA	4-7 _	2 _ 4
Labor required per 100T	4	NA	10_20	8_15
Automation & Centralized Control	Full AI & IoT control	Partial automation	Limited automation	None
Ease of Operation	Simple – Only 4 operators required	Medium – Requires skilled staff	Complex – Depends on staff expertise	Labor-intensive
Need for Agronomists/Specialists	No – Only operators needed	Yes – Agro-tech specialists needed	Yes – Agronomists required	Yes – Full-time agricultural experts
Urban Integration Capability	Yes – Compact and modular	Yes – Usually designed for urban use	No – Requires large rural land	No – Requires extensive farmland
Waste-Free Ecological Production	Yes – Zero waste, closed-loop	Partial – Moderate waste output	No – Organic + chemical waste	No – Significant environmental impact