Supplementary Data

Table 1: Effect of eCO_2 on wheat yield and nutritional contents over the last five decades. Only experimental research and experiments that reported data on the impact of eCO_2 in isolation were included.

Category	Quality parameter	eCO_2 effect	Percentage change from ambient CO_2 (and citation)
Yield	Grain yield/weight (g) (g.plant^{-1}) (g.m^{-2})DW (kg.ha^{-1}) or (kg.m^{-2})	Increase	5.4-13.3% (McKee & Woodward 1994), 6.3% (Cai *et al*. 2016), 9.3-78.6% (Ulfat *et al*. 2021[a]), 10.4-10.8% (Högy *et al*. 2013), 12.7% (Mitchell *et al*. 1996), 13.3% (Monje & Bugbee 1998), 13.7% (Veisz *et al*. 1996), 14.2-16.7% (Bourgault *et al*. 2016), 14.7% (Pinter *et al*. 2000), 15% (Singh *et al*. 2013), 15% (Lenka *et al*. 2021), 16.5% (Kendall *et al*. 1985), 17-23% (Wei *et al*. 2024), 18.1% (Pleijel *et al*. 2000), 18.7-24% (Sayed *et al*. 2022), 20.1% (Balouchi *et al*. 2009), 23.5% (Grashoff *et al*. 1995), 24.8% (Li *et al*. 2001), 25% (Reuveni & Bugbee 1997), 25.5% (Gifford 1979), 28.3% (McKee *et al*. 1997), 30.1% (Chaudhuri *et al*. 1990), 30.5% (Dijkstra *et al*. 1999), 30.6% (Chavan *et al*. 2019), 32.4% (Manoj-Kumar *et al*. 2012), 36.4-49.7% (Abdelhakim *et al*. 2022), 45.3- 51.6% (Prakash *et al*. 2017), 34.1% (Grashoff *et al*. 1995), 36.2% (Gifford & Morison 1993), 36.5% (Apel 1976), 37% (Fitzgerald *et al*. 2016), 39% (Macabuhay *et al*. 2018), 41.4% (Reuveni & Bugbee 1997), 49.6% (Gifford 1979), 50.4% (Ulfat *et al*. 2021a), 56% (Fitzgerald *et al*. 2016), 59.6- 62.1% (Sionit *et al*. 1981)
	Plant biomass (g) or weight (g plant^{-1})		47.5% (Jayawardena *et al*. 2020), 6.9- 17.9% (Abdelhakim *et al*. 2022), 19.3- 57.4% (Sayed *et al*. 2022)
	Plot yield or weight (g.plot^{-1}) (g.pot^{-1}) or (kg.m^{-3})		17.9- 26.9% (Weigel *et al*. 1994), 27% (Fangmeier *et al*. 1996), 33% (Izaurralde *et al*. 2003), 2.5- 27.3% (Rogers *et al*. 1998), 59.4% (Goudriaan & de Ruiter 1983), 74% (Wolf *et al*. 1996), 1% (Kimball *et al*. 2002)
Carbohydrate contents	Fructose (mg.g^{-1}) or (nmol mg^{-1}) DW/FW	Increase	14.3-116.7% (Abdelhakim *et al*. 2021), 15.1 (Högy *et al*. 2009), 18.5 (Högy *et al*. 2013), 29.3- 58% (Ulfat *et al*. 2021[b])
	Glucose (mg.g^{-1}) DW/FW		10-12.6% (Högy *et al*. 2009), 11-161.5% (Ulfat *et al*. 2021[a]), 15-106.7% (Abdelhakim *et al*. 2021), 32.1% (Chang *et al*. 2023), 199% (Abdelhakim *et al*. 2022)
	Maltose (g.m^{-2}) DW		1.6% (Högy *et al*. 2013), 15.7% (Högy *et al*. 2009)
	Sucrose (mg g^{-1}) DW/FW		5.2-105.1% (Ulfat *et al*. 2021[a]), 11.6% (Högy *et al*. 2009), 13% (Högy *et al*. 2013), 32% (Abdelhakim *et al*. 2021)
	Amylopectin (mg.g^{-1})		1.2- 4.2% (Wei *et al*. 2024)
	Amylose (mg.g^{-1})		6.5-11% (Wei *et al*. 2024)
	Starch (mg.g^{-1}) or (g.m^{-2}) DW		5.2% (Högy *et al*. 2013), 36.1% (Chang *et al*. 2023), 63.9% (Jauregui *et al*. 2015)
	Fuctan (g.m^{-2})DW		7.6% (Högy *et al*. 2009), 33.2% (Högy *et al*. 2013)
	Raffinose (g.m^{-2})DW		14.8% (Högy *et al*. 2009), 20.8% (Högy *et al*. 2013)
	Total non-structural carbohydrates (g.m^{-2}) or (mg.g^{-1})DW		3.2% (Chang *et al*. 2023), 5.9% (Högy *et al*. 2013), 14% (Högy *et al*. 2009)
	Total starch content (mg.g^{-1})		3.3-4.7% (Wei *et al*. 2024)
	Water soluble carbohydrate (mg.g^{-1})		3.5- 3.9% (Panozzo *et al*. 2019), 61.2% (Bourgault *et al*. 2016)
	Starch (mg.g^{-1}) or (g.m^{-2}) DW	Decrease	-2.5% (Högy *et al*. 2009), -19.3 -46% (Abdelhakim *et al*. 2021)
	Fructose (mg.g^{-1}) or (nmol mg^{-1}) DW/FW		-6.4% (Jauregui *et al*. 2015), -20.5-58.2% (Abdelhakim *et al*. 2021), -39% (Ulfat *et al*. 2021[a]), -62.4% (Chang *et al*. 2023)
	Glucose (mg.g^{-1}) DW/FW		-17.4% (Abdelhakim *et al*. 2021), -43.6% (Jauregui *et al*. 2015), -74.1% (Abdelhakim *et al*. 2022)
	Sucrose (mg g^{-1}) DW/FW		-1.5-54.5% (Abdelhakim *et al*. 2021), -17.4% (Chang *et al*. 2023), -20.2% (Jauregui *et al*. 2015)

	Soluble sugar content (mg.g^{-1}) DW		-29.2% (Chang *et al*. 2023), -35.7% (Balouchi *et al*. 2009)
Nitrogenous contents	catalase (mg.g^{-1}) FW	Increase	78% (Alsherif & AbdElgawad 2023)
	Dehydroascorbate reductase (mg.g-1) FW		176% (Alsherif & AbdElgawad 2023)
	Glutathione peroxidase (mg.g-1) FW		81.3% (Alsherif & AbdElgawad 2023)
	Glutathione reductase (mg.g-1) FW or (µ.mg^{-1})		13.9% (Yilmaz *et al*. 2017), 49.1% (Alsherif & AbdElgawad 2023)
	Peroxidase (mg.g-1) FW		27% (Alsherif & AbdElgawad 2023)
	Spermidine (pmol.mg-1) DW		17.3- 64.6% (Abdelhakim *et al*. 2022)
	Norspermidine (pmol.mg^{-1}) DW		112.1% (Abdelhakim *et al*. 2022)
	1,3-diaminopropane (pmol.mg^{-1}) DW		12.2% (Abdelhakim *et al*. 2022)
	2-aminoapidic acid (pmol.mg^{-1}) DW		25% (Abdelhakim *et al*. 2022)
	Putrescine (pmol.mg^{-1}) DW		246% (Abdelhakim *et al*. 2022)
	Agmantine (pmol.mg^{-1}) DW		18.6% (Abdelhakim *et al*. 2022)
	Alanine (pmol.mg-1) DW		11- 19% (Abdelhakim *et al*. 2022)
	Arginine (pmol.mg-1) DW		20% (Abdelhakim *et al*. 2022)
	Asparagine (pmol.mg-1) DW		49.5- 106.5% (Abdelhakim *et al*. 2022)
	Aspartic acid (pmol.mg-1) DW		28.4% (Abdelhakim *et al*. 2022)
	Cysteine (pmol.mg-1) DW		23.9% (Abdelhakim *et al*. 2022)
	Glutamate (mg.g^{-1})		5.2% (Jauregui *et al*. 2015)
	Histidine (pmol.mg-1) DW		48.9% (Abdelhakim *et al*. 2022)
	Lysine (pmol.mg-1) DW		45.7- 97.8% (Abdelhakim *et al*. 2022)
	Methionine (pmol.mg-1) DW		15.2% (Abdelhakim *et al*. 2022)
	N-acetyl glutamate (pmol.mg-1) DW		0.6- 9% (Abdelhakim *et al*. 2022)
	Tryptophan (pmol.mg-1) DW		402% (Abdelhakim *et al*. 2022)
	Tyrosine (pmol.mg-1) DW		64.4% (Abdelhakim *et al*. 2022)
	β -alanine (pmol.mg-1) DW		33% (Abdelhakim *et al*. 2022)
	β -aminobutyric acid (pmol.mg-1) DW		40- 54% (Abdelhakim *et al*. 2022)
	γ -aminobutyric acid (pmol.mg-1) DW		4.7% (Abdelhakim *et al*. 2022)
	Histamine (pmol.mg-1) DW		34- 85.2% (Abdelhakim *et al*. 2022)
	Citrulline (pmol.mg-1) DW		85.1% (Abdelhakim *et al*. 2022)
	N-acetylornithine (pmol.mg-1) DW		100.2% (Abdelhakim *et al*. 2022)
	Ornithine (pmol.mg-1) DW		5% (Abdelhakim *et al*. 2022)
	Soluble protein (mg.g-1) DW		19% (Chang *et al*. 2023)
	Spermidine (pmol.mg-1) DW	Decrease	-40.3- 64.6% (Abdelhakim *et al*. 2022)
	Superoxide dismutase (mg.g^{-1}) FW		-1.3% (Alsherif & AbdElgawad 2023)
	1,3-diaminopropane (pmol.mg^{-1}) DW		-52.8% (Abdelhakim *et al*. 2022)
	Putrescine (pmol.mg^{-1}) DW		-6.3% (Abdelhakim *et al*. 2022)
	Norspermidine (pmol.mg^{-1}) DW		-41.7% (Abdelhakim *et al*. 2022)
	2-aminoapidic acid (pmol.mg^{-1}) DW		-45.5% (Abdelhakim *et al*. 2022)
	Agmantine (pmol.mg^{-1}) DW		-22.3% (Abdelhakim *et al*. 2022)

	Alanine (g.m^{-2}) or (mg.g^{-1}) DW		-5.3% (Hogy *et al*. 2009), -7% (Hogy *et al*. 2013), -18.8% (Jauregui *et al*. 2015)
	Dehydroascorbate reductase (µ.mg^{-1})		-4.5% (Yilmaz *et al*. 2017)
	Ascorbate peroxidase (µ.mg^{-1})		-0.8% (Yilmaz *et al*. 2017)
	Gliadin (g.m^{-2}) or (mg.g^{-1}) DW		-8.1% (Högy *et al*. 2009), -13.3% (Högy *et al*. 2013),
	Glutathione-S-transferase (nmol/min.mg)		-31.6% (Alsherif & AbdElgawad 2023)
	Gluten (g.m^{-2}) or (mg.g^{-1}) DW		-7.2% (Högy *et al*. 2009), -11.3% (Högy *et al*. 2013),
	Glutenin (g.m^{-2}) or (mg.g^{-1}) DW		-5.5% (Högy *et al*. 2009), -5.7% (Högy *et al*. 2013),
	Metallothioneins (nmol.g^{-1}) FW		-17.5% (Alsherif & AbdElgawad 2023)
	Monodehydroascorbate reductase (µ.mg^{-1})		-50.1% (Yilmaz *et al*. 2017)
	Cadaverine (pmol.mg^{-1}) DW		-25-45.45% (Abdelhakim *et al*. 2022)
	Arginine (g.m^{-2}) or (pmol.mg^{-1}) DW		-5.5% (Högy *et al*. 2009), -5.6% (Högy *et al*. 2013), -33.3% (Abdelhakim *et al*. 2022)
	Asparagine (g.m^{-2}) or (pmol.mg^{-1}) DW		-5.2% (Högy *et al*. 2009), -5.5% (Jauregui *et al*. 2015), -8.2% (Högy *et al*. 2013), -41.4% (Abdelhakim *et al*. 2022)
	Cysteine (g.m^{-2}) or (pmol.mg^{-1}) DW		-4.2% (Högy *et al*. 2013), -7.4% (Högy *et al*. 2009), -42.5% (Abdelhakim *et al*. 2022)
	Glutamic acid (g.m^{-2}) or (pmol.mg^{-1}) DW		-6.2% (Högy *et al*. 2013), -10.7% (Högy *et al*. 2009), -16.4-31.4% (Abdelhakim *et al*. 2022)
	Gamma-aminobutyric acid (mg.g^{-1})		-28.1% (Jauregui *et al*. 2015)
	Glutamine (mg.g^{-1}) or (pmol.mg^{-1}) DW		-8.6- 20% (Abdelhakim *et al*. 2022), -64.8% (Jauregui *et al*. 2015)
	Glycine (g.m^{-2})		-5.7% (Högy *et al*. 2013), -8.6% (Högy *et al*. 2009)
	Histidine (g.m^{-2})		-5.1% (Högy *et al*. 2009), -5.5% (Högy *et al*. 2013), -60.8% (Abdelhakim *et al*. 2022)
	Homoarginine (pmol.mg-1) DW		-7—28.9% (Abdelhakim *et al*. 2022)
	Isoleucine (g.m^{-2})		-7.4% (Högy *et al*. 2013), -8.7% (Högy *et al*. 2009)
	Leucine (g.m^{-2})		-6.1% (Högy *et al*. 2013), -8.6% (Högy *et al*. 2009)
	Lysine (g.m^{-2})		-5.4% (Högy *et al*. 2013), -7.1% (Högy *et al*. 2009)
	Methionine (g.m^{-2}) or pmol.mg^{-1}) DW		-6.1% (Högy *et al*. 2009), -8.3% (Högy *et al*. 2013), -32% (Abdelhakim *et al*. 2022)
	Phenylalanine (g.m^{-2}) or pmol.mg^{-1}) DW		-5-22.7% (Abdelhakim *et al*. 2022), -7.6% (Högy *et al*. 2009), -8.4% (Högy *et al*. 2013)
	Proline (µg.g^{-1}) (g.m^{-2}) (mg.g^{-1})or pmol.mg^{-1}) DW		-4-65.2% (Abdelhakim *et al*. 2022), -7.4% (Högy *et al*. 2013), -9.8% (Högy *et al*. 2009), -6.8% (Balouchi *et al*. 2009), -13.8% (Jauregui *et al*. 2015)
	Serine (g.m^{-2}) or pmol.mg^{-1}) DW		-7.1% (Högy *et al*. 2009), -7.3% (Högy *et al*. 2013), -20.1-25.1% (Abdelhakim *et al*. 2022)
	Threonine (g.m^{-2}) or pmol.mg^{-1}) DW		-5.3% (Högy *et al*. 2009), -6.8% (Högy *et al*. 2013), -26.9-34.8% (Abdelhakim *et al*. 2022)
	Tryptophan (g.m^{-2}) or pmol.mg^{-1}) DW		-5.3% (Högy *et al*. 2009), -6% (Högy *et al*. 2013), -6.7% (Abdelhakim *et al*. 2022)
	Tyrosine (g.m^{-2}) or pmol.mg^{-1}) DW		-7.9% (Högy *et al*. 2013), -8.9% (Högy *et al*. 2009), -10.1% (Abdelhakim *et al*. 2022)
	Valine (g.m^{-2}) or pmol.mg^{-1}) DW		-6.6% (Högy *et al*. 2013), -8.1% (Högy *et al*. 2009), -15 -27% (Abdelhakim *et al*. 2022)
	β -alanine (pmol.mg^{-1}) DW		-26.4% (Abdelhakim *et al*. 2022)
	γ -aminobutyric acid (pmol.mg^{-1}) DW		-40.3% (Abdelhakim *et al*. 2022)
	Citrulline (pmol.mg^{-1}) DW		-47% (Abdelhakim *et al*. 2022)
	N-acetylornithine (pmol.mg^{-1}) DW		-30.2% (Abdelhakim *et al*. 2022)
	Ornithine (pmol.mg^{-1}) DW		-36.5% (Abdelhakim *et al*. 2022)
	Protein content (µg.g^{-1}) or (mg.g^{-1}) FW		-7.4-8.5% (Wei *et al*. 2024), -8.9-17.1% (Myers *et al*. 2014), -18% (Balouchi *et al*. 2009), -19.1% (Jayawardena *et al*. 2020), -19.5% (Jauregui *et al*. 2015)
	Grain & flour protein (kg.N)		-5% (Kimball *et al*., 2002)

Vitamin contents	Alpha tocopherols (mg.g^{-1}) FW	Increase	43.3% (Alsherif & AbdElgawad 2023)
	Ascorbate (mg.g^{-1}) FW		18% (Alsherif & AbdElgawad 2023)
	Ascorbate peroxidase (mg.g^{-1}) FW		14.3% (Alsherif & AbdElgawad 2023)
	Ascorbic acid (mg.g^{-1}) FW		1.9% (Yilmaz *et al*. 2017)
Mineral contents	Phosphorous concentration in grain and leaf (mg.g^{-1})DW	Increase	8.7- 23.3% (Sayed *et al*. 2022)
	Aluminium (g.m^{-2}) DW		8.8% (Högy *et al*. 2013)
	Boron (g.100g^{-1}) or (g.m^{-2}) DW		27.2% Högy *et al*. (2013), 80.9% (Jauregui *et al*. 2015)
	Chloride (pmol mg^{-1}) DW		1.3- 25.7% (Abdelhakim *et al*. 2022)
	Chromium (g.m^{-2}) DW		4.6% (Högy *et al*. 2009)
	Copper (mg.kg^{-1})		14.9% (Yilmaz *et al*. 2017)
	Lead (g.m^{-2}) DW		15% (Högy *et al*. 2009)
	Magnesium (g.100g^{-1})		13.7% (Jauregui *et al*. 2015)
	Molybdenum (g.100g^{-1}) or (g.m^{-2}) DW		35.8% (Jauregui *et al*. 2015), 7.7% (Högy *et al*. 2013), 8.4% (Högy *et al*. 2009)
	Nitrate (pmol.mg^{-1}) DW		127.1% (Abdelhakim *et al*. 2022)
	Phosphate (pmol mg^{-1}) DW		26.6% (Abdelhakim *et al*. 2022)
	Potassium (g.m^{-2}) DW		4.5% (Högy *et al*. 2009)
	Selenium		18.2% (Högy *et al*. 2013)
	Sodium (g.m^{-2}) DW		10.4% (Högy *et al*. 2013), 17% (Högy *et al*. 2009)
	Sulfate (pmol.mg^{-1}) DW		37.3% (Abdelhakim *et al*. 2022)
	Sulfur (g.m^{-2}) DW		2.4% (Högy *et al*. 2013)
	Zinc (mg.kg^{-1}) or (g.m^{-2}) DW		0.7% (Högy *et al*. 2013), 27.4% (Yilmaz *et al*. 2017)
	Cadmium (g.m^{-2}) DW	Decrease	-8.1% (Högy *et al*. 2013), -14.1% (Högy *et al*. 2009)
	Calcium (g.100g^{-1})		-3% (Högy *et al*. 2009), -6.6% (Högy *et al*. 2013), -17.1% (Jauregui *et al*. 2015)
	Chromium (g.m^{-2}) DW		-4.1% (Högy *et al*. 2013)
	Copper (g.100g^{-1}) or (g.m^{-2}) DW		-1.5% (Högy *et al*. 2013), -2.6% (Högy *et al*. 2009), -28.5% (Jauregui *et al*. 2015)
	Iron (g.100g^{-1}) (mg.kg^{-1}) or (g.m^{-2}) DW		-31.9% (Jauregui *et al*. 2015), 9.5% (Högy *et al*. 2009), -5.9% (Högy *et al*. 2013), -1.8% (Yimaz *et al*. 2017), -2.3-8.7% (Myers *et al*. 2014)
	Lead (g.m^{-2}) DW		-9.5% (Högy *et al*. 2013)
	Leaf Nitrogen (g.100g^{-1})		-11.2% (Jauregui *et al*. 2015)
	Magnesium (g.m^{-2}) DW		-1.6% (Högy *et al*. 2009), -2.7% (Högy *et al*. 2013)
	Manganese (g.100g^{-1}) (mg.kg^{-1}) or (g.m^{-2}) DW		-3.9% (Högy *et al*. 2009), -1.5% (Högy *et al*. 2013), -7.2% (Yilmaz *et al*. 2017), -66.8% (Jauregui *et al*. 2015)
	Nickel (g.m^{-2}) DW		-2% (Högy *et al*. 2009), -2.3% (Högy *et al*. 2013)
	Nitrate (pmol mg^{-1}) DW		-8% (Abdelhakim *et al*. 2022), -3.7% (Panozzo *et al*. 2019)
	Phosphate (pmol mg^{-1}) DW		-29.6% (Abdelhakim *et al*. 2022)
	Phosphorous (g.100g^{-1}) or (g.m^{-2}) DW		-0.9% (Högy *et al*. 2009), -1.4 (Högy *et al*. 2013), -16.7% (Jauregui *et al*. 2015)
	Potassium (g.100g^{-1}) or (g.m^{-2}) DW		-1.9% Högy *et al*. (2013), -36.8% Jauregui *et al*. (2015)
	Selenium (g.m^{-2}) DW		-11% (Högy *et al*. 2009)
	Silicon (g.m^{-2}) DW		-6.9% (Högy *et al*. 2009), -10.2% (Högy *et al*. 2013)

	Sulfate (pmol.mg^{-1}) DW		-64.7% (Abdelhakim *et al*. 2022)
	Sulfur (g.100g^{-1}) or (g.m^{-2}) DW		-6.5% (Jauregui *et al*. 2015), -7% (Högy *et al*. 2009)
	Zinc (g.100g^{-1}) or (g.m^{-2}) DW		-49% (Jauregui *et al*. 2015), 2% Högy *et al*. (2009), -9.3-12.3% (Myers *et al*. 2014)
Other phytochemicals	Carotenoid (mg.g^{-1}) (µmol.g^{-1}) or (mg.g^{-1}) FW/DW	Increase	0.1% (Balouchi *et al*. 2009), 4.7% (Alsherif & AbdElgawad 2023), 10% (Abdelhakim *et al*. 2021)
	Ferulic acid (pmol.mg^{-1}) DW		40.7- 55.8% (Abdelhakim *et al*. 2022)
	Chlorogenic acid (pmol.mg^{-1}) DW		480.8% (Abdelhakim *et al*. 2022)
	Flavonoids (mg.g^{-1}) FW		67.9% (Alsherif & AbdElgawad 2023)
	Polyphenol (mg.g^{-1}) FW		9.8% (Alsherif & AbdElgawad 2023)
	Salicylic acid (pmol.mg^{-1}) DW		270% (Abdelhakim *et al*. 2022)
	Chlorophyll b (mg.g^{-1}) FW		50% (Alsherif & AbdElgawad 2023)
	Total chlorophyll (mg.g^{-1}) DW		13% (Abdelhakim *et al*. 2021)
	4-hydroxybenzoic acid (pmol.mg^{-1}) DW		39.2- 68% (Abdelhakim *et al*. 2022)
	Citrate (pmol.mg^{-1}) DW		3.2% (Abdelhakim *et al*. 2022)
	Total glutathione (nmol.g^{-1}) FW		33.3% (Alsherif & AbdElgawad 2023)
	Anthocyanin (µmol.g^{-1}) FW	Decrease	-25.5% (Balouchi *et al*. 2009)
	Chlorogenic acid (pmol.mg^{-1}) DW		-86.9% (Abdelhakim *et al*. 2022)
	Flavonoid 270 (µmol.g^{-1}) FW		-28.7-68.8% (Balouchi *et al*. 2009)
	Phytate		-4.1% (Myers *et al.*, 2014)
	phytochelatins (nmol.g^{-1}) FW		-12% (Alsherif & AbdElgawad 2023)
	Salicylic acid (pmol.mg^{-1}) DW		-13-80% (Abdelhakim *et al*. 2022)
	Carotenoid (mg.g^{-1}) DW		-6.9 -9% (Abdelhakim *et al*. 2021)
	Chlorophyll a (mg.g^{-1}) FW		-10.7% (Alsherif & AbdElgawad 2023)
	Chlorophyll a:b (mg.g^{-1}) DW		-1-6.5% (Abdelhakim *et al*. 2021)
	Total chlorophyll (mg.g^{-1}) DW		-1-5.9% (Abdelhakim *et al*. 2021),
	Oxaloacetate (mg.g^{-1})		-39.5% (Jauregui *et al*. 2015)
	p-coumaric acid (pmol.mg^{-1}) DW		-20.7-27% (Abdelhakim *et al*. 2022)
	Malate (mg.g^{-1}) or (pmol.mg^{-1}) DW		-6.3-48% (Abdelhakim *et al*. (2022), -73% (Jauregui *et al*. 2015)
	Citrate (mg.g^{-1}) or (pmol.mg^{-1}) DW		-8.9% (Abdelhakim *et al*. 2022), -52.9% (Jauregui *et al*. 2015)
	Thiobarbituric Acid (nmol.g^{-1}) FW		-15.2% (Yilmaz *et al*. 2017)
	Reduced glutathione (mg.g-1) FW		-12.9% (Alsherif & AbdElgawad 2023)