



National Agromet Advisory Service Bulletin

based on

Extended Range Weather Forecast (ERFS)

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**AICRP on Agro-Meteorology (AICRPAM),
Central Research Institute for Dryland Agriculture (CRIDA),
Indian Council of Agricultural Research (ICAR)**

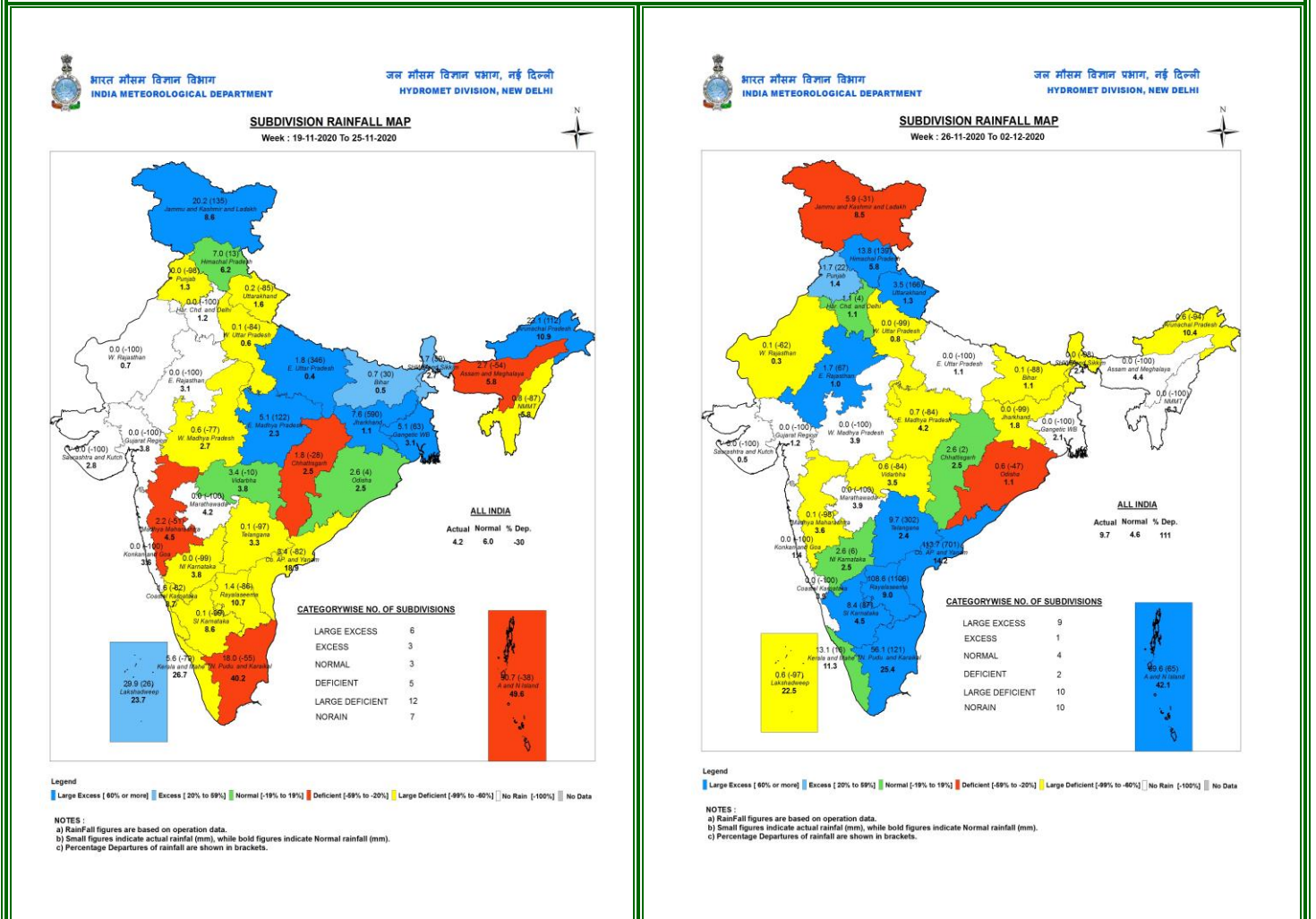
&

**India Meteorological Department (IMD),
Earth System Science Organization**

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

(19th November to 2nd December, 2020)



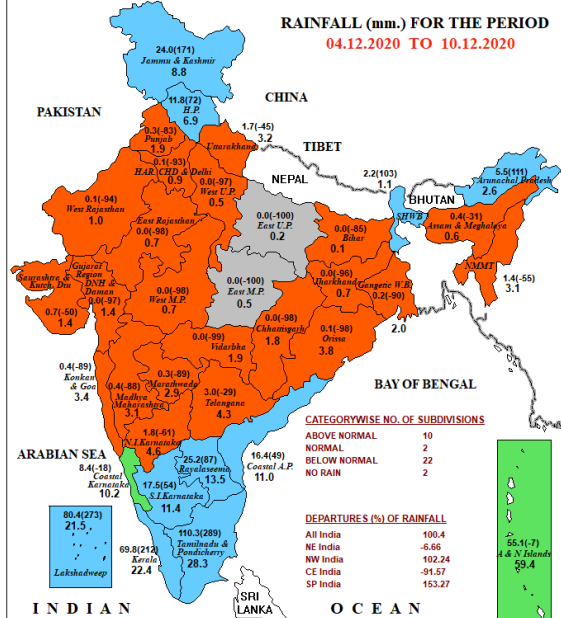
- Normal or above normal rainfall occurred in both the weeks in Himachal Pradesh.
- Normal or above normal rainfall occurred in either of the two weeks in Jammu & Kashmir and Ladakh (UTs), Uttarakhand, East Uttar Pradesh Punjab, Haryana Chandigarh & Delhi, East Rajasthan, East Madhya Pradesh, Chhattisgarh, Vidarbha, Bihar, Jharkhand, Odisha, West Bengal & Sikkim, Arunachal Pradesh, North Interior Karnataka, South Interior Karnataka, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe, Andaman & Nicobar Islands and Lakshadweep.
- Below Normal rainfall / no rain occurred in both the weeks over rest of the country.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 02 Dec.) (4th to 17th December, 2020)

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Rainfall Forecast Map - Normal RF Based Categories

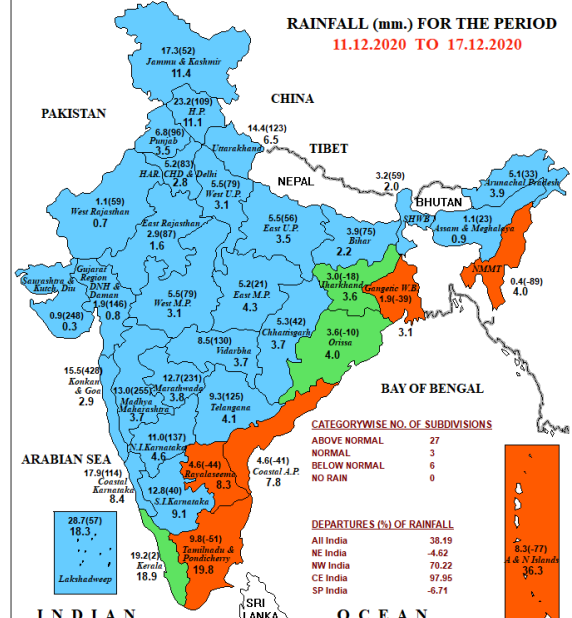


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) NO DATA

NOTES:
 (a) Rainfall figures are based on MME Forecast data.
 (b) Small figures indicate actual rainfall [mm.], while bold figures indicate Normal rainfall [mm.].
 Percentage Departures of Rainfall are shown in Brackets.

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Rainfall Forecast Map - Normal RF Based Categories

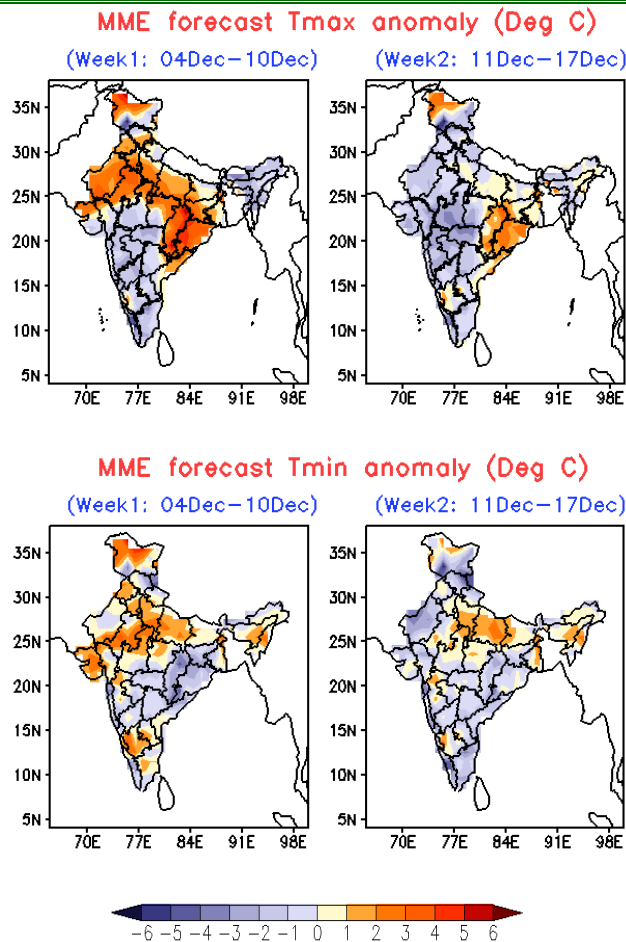


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)
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NOTES:
 (a) Rainfall figures are based on MME Forecast data.
 (b) Small figures indicate actual rainfall [mm.], while bold figures indicate Normal rainfall [mm.].
 Percentage Departures of Rainfall are shown in Brackets.

- Week-1 (04.12.2020 to 10.12.2020) and Week-2 (11.12.2020 to 17.12.2020):** Tamilnadu, Kerala will be getting very heavy / extremely heavy rainfall associated with the cyclone in week 1. Slight rainfall activity over eastern part of the Arabian adjoining to west coast of India is expected in week-2, however, Bay of Bengal will remain inactive in week-2.

**Maximum and Minimum temperature anomaly ($^{\circ}$ C) forecast
for next 2 weeks (IC – 02 Dec.)
(4th to 17th December, 2020)**



Maximum Temperature (Tmax)

- **Week-1 (04.12.2020 to 10.12.2020) and Week-2 (11.12.2020 to 17.12.2020):** Maximum Temperature (Tmax) will be above normal over northern /north-western and some parts of eastern India in week 1, whereas, over the western part of India it will be slightly below normal in week 1. During week 2, Tmax over western part will be below normal, whereas, over the eastern parts (Odisha, Gangetic West Bengal and parts of northeast) it will be slightly above normal to normal.

Minimum Temperature (Tmin)

- **Week-1 (04.12.2020 to 10.12.2020) and Week-2 (11.12.2020 to 17.12.2020):** Minimum temperature (Tmin) will be slightly above normal over northwest India in week-1. In week-2, it will be close to normal.

Strategic Agricultural Planning based on rainfall during next two weeks till 17 December 2020

Agro-met Advisories

Kerala

Amount of rainfall received over Kerala is 322.9 mm (-30% deficit) during 01 October 2020 - 03 December 2020. The extended range weather forecast for next two weeks (04 - 10 December and 11- 17 December 2020) is above normal for week-1 and normal for week-2.

- Due to light rain and high humid weather conditions, there is a chance of downy mildew disease in cabbage and cauliflower crops. To control, spray of Copper oxychloride @ 2 g per litre or Potassium phosphate @ 3-4 ml per litre of water is advised.
- Due to chances of heavy rain and strong winds, it is advised to postpone the application of fertilizers and plant protection chemicals in paddy fields for few days and make the arrangements for drainage of excess water from the paddy fields.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 326.2 mm (-11% deficit) during 01 October 2020 - 03 December 2020. The extended range weather forecast for next two weeks (04 - 10 December and 11- 17 December 2020) is above normal for week-1 and week-2.

- Under the prevailing weather conditions, farmers are advised to monitor borer incidence in sorghum. If incidence is noticed, spray Methyl demeton 25 EC 500 ml/ha or Dimethoate 30 EC 500 ml/ha.
- Present weather condition is favorable for powdery mildew incidence in pulses. It is advised to spray Neem Seed Kernel Extract (NSKE) 5% or Neem oil 3% twice at 10 days intervals from initial disease appearance or Spray Carbendazim 1g/litre or Wettable Sulphur 2.5 g/litre.

Maharashtra

Rainfall received over Madhya Maharashtra is 165.9 mm (70% excess), Marathwada is 106.5 mm (14% excess), Vidharbha is 51.7 mm (-30% deficit) and Konkan region 241.8 mm (80% large excess) during 01 October 2020 - 03 December 2020. The extended range weather forecast for next two weeks (04 - 10 December and 11 - 17 December 2020) over Madhya Maharashtra, Vidharbha, Konkan and Marathawada is below normal for week-1 and above normal over Madhya Maharashtra, Konkan, Vidharbha and Marathwada for week-2.

Konkan

- Due to increase in temperature, it is advised to provide irrigation in coconut and arecanut orchard.
- Present weather condition is congenial for tea mosquito bug and thrips incidence in cashewnut. It is advised to spray Profenophos 50% EC @10 ml per 10 litres of water.

Marathwada

- For management of pod borer in pigeonpea crop, it is advised to spray Quinalphos 25% @ 20 ml or Emamectin benzoate 5% @ 4.4 g per 10 litres of water.

Vidharbha

- Due to cloudy weather and decrease in night time temperature, there is a chance of pod borer incidence in pigeonpea. To manage, it is advised to spray 5% NKSE or Azadirachtin 300 ppm @ 50 ml per 10 litres of water or Azadirachtin 1500 ppm @ 25 ml or Quinolphos 25% EC @ 20 ml or Thiodicarb 75% WP @ 20 g per 10 litres of water.

Hisar

Amount of rainfall received over Hisar is 6.5 mm (-53% deficit) during 01 October 2020 - 03 December 2020. The extended range rainfall forecast provided for next two weeks (04 - 10 December and 11- 17 December 2020) over Hisar is below normal for week-1 and above normal for week-2.

- Due to anticipated weather condition, farmers are advised to apply need-based irrigation and sowing of wheat.
- There is a higher chance of decrease in night temperature. Therefore, it is advised to keep the animals under shed and clean around to control fly and mosquitos in cattle shade.

Karnataka

Rainfall received during 01 October 2020 - 03 December 2020 over South Interior Karnataka is 187.4 mm (-3% deficit) and North Interior Karnataka is 179.7 mm (36% excess). The extended range weather forecast for next two weeks (04 - 10 December and 11 - 17 December 2020) over South Interior Karnataka above normal and below normal over North Interior Karnataka for week-1 and above normal over South Interior Karnataka and North Interior Karnataka for week-2.

South Interior Karnataka

- Due to chance of cloudy and rainy weather conditions, farmers are advised to postpone the harvesting, sun drying and winnowing of *kharif* crops like ragi, maize and groundnut.
- Under prevailing weather conditions, it is advised to postpone the insecticide spraying operation in horticulture /orchard crops and agricultural crops.

Uttar Pradesh

Rainfall received during 01 October 2020 - 03 December 2020 over East Uttar Pradesh 8.0 mm (-81% large deficit) and West Uttar Pradesh is 4.4 mm (-83% large deficit). The extended range weather forecast for next two weeks (04 - 10 December and 11- 17 December 2020) over East Uttar Pradesh is no rain and below normal over West Uttar Pradesh for week-1 and above normal over East Uttar Pradesh and West Uttar Pradesh for week-2.

Western Uttar Pradesh

- Due to the no rainfall condition, farmers are advised to irrigate the timely sown wheat after 20-

25 days of sowing.

- If sufficient soil moisture is there, sowing of late sown barley varieties may be taken up with varieties Jyoti (K-572/10), DL-88, Rekha (BCU-73), K-551, K-508, K-141, Priti (K-409), Lakhan (K-226) and K-329.

Eastern Uttar Pradesh

- Intercultural operation is advised to check evaporation losses.
- Under the prevailing weather conditions, sowing of chickpea, mustard, potato, pea and other *rabi* vegetables is advised.

Jammu

Amount of rainfall received over Jammu is 50 mm (-30% deficit) during 01 October 2020 - 03 December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11- 17 December 2020) on rainfall over Jammu is above normal for week-1 and week-2.

- Under prevailing weather conditions, farmers may go for sowing of late sown wheat with varieties WH-1021, PBW-590, PBW-373, Raj-3077, Raj-3765, DBW-16.
- For the management of downey mildew disease in vegetable and horticultural crops, it is advised to spray Mancozeb @ 0.25%.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 91.8 mm (30% excess) during 01 October 2020 - 03 December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11- 17 December 2020) on rainfall over Chhattisgarh is below normal for week-1 and above normal for week-2.

- For the management of powdery mildew disease in field pea, it is advised to spray liquid Sulfex @ 8 ml/14 litres of water.
- Under prevailing weather conditions, sowing of sunflower is advised with recommended varieties TNAU, SUF-7, BSH-1, KBSH-1, DRSH-1 Jwalamukhi, Surya.

West Bengal

Amount of rainfall received over West Bengal is 80.5 mm (-46% deficit) during 01 October 2020 - 03 December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11- 17 December 2020) on rainfall over West Bengal is below normal for week-1 and week-2.

- Under prevailing weather condition, there is a chance of attack of black-rot of crucifers in the cabbage and cauliflower. To control, it is advised to spray 1g Streptocycline in 10 litres of water.
- Nursery bed preparation for the sowing of boro rice is advised with recommended improved

varieties Supriya, Jamini, Bhupen, IET-2233.

Odisha

Amount of rainfall received over Odisha is 166.6 mm (33% excess) during 01 October 2020 - 03 December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11- 17 December 2020) on rainfall over Odisha is below normal for week-1 and normal for week-2.

- Under prevailing weather condition, there is a chance of aphid infestation in early sown mustard crop. To manage, it is advised to keep yellow sticky traps @ 8 traps per acre or spray Thiamethoxam 25% WG @ 40 g/acre or Acetamiprid 20% SP @ 50 g/acre in 200 litres of water.
- For the management of pod borer and blister beetle in red gram crop, to manage pod borer, it is advised to spray Chlorpyrifos 50% + Cypermethrin 5% EC @ 400 ml/acre or Profenophos 50% EC @ 400 ml/acre. To manage the blister beetles, manually collect the insects and put them in kerosene to kill or put them in a pit and cover the soil.

Assam

Amount of rainfall received over Assam is 214.0 mm (15% excess) during 01 October 2020 - 03 December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11- 17 December 2020) on rainfall over Assam is below normal for week-1 and above normal for week-2.

- Due to favorable weather, there is a chance of pod borer in green gram and black gram crop. Farmers are advised to spray Emamectin Benzoate 5% SG @ 5 g/10 litres water to control the pest infestation.
- Prevailing weather condition is also congenial for cut worm infestation in *rabi* maize. To control, it is advised to apply Malathion @ 3.3 kg/bigha as a foliar treatment on seedlings.

Madhya Pradesh

Amount of rainfall received over Madhya Pradesh is 32.2 mm (-33% deficit) during 01 October 2020 – 03 December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11- 17 December 2020) on rainfall over Madhya Pradesh is no rain for week-1 and above normal for week-2.

- Farmers are advised to prepare the fields for sowing of wheat crop under irrigated conditions.
- Due to anticipated light rainfall situation and lowering of air temperature, it is advised to keep rice surface litter on the floor of poultry shed to protect the birds from low temperature and absorption of extra moisture.

Rajasthan

Amount of rainfall received over Rajasthan is 8.7 mm (-61% large deficit) during 01 October 2020 - 03

December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11 - 17 December 2020) on rainfall over Rajasthan is below normal for week-1 and above normal for week-2.

- Farmers are advised for sowing of late sown wheat with varieties Lok-1, WH-147, Raj-3765, Raj 3777, HI-8498.
- For the management of mustard sawfly, dusting of Methyl parathion 2% or Carbaryl 5% WP @ 20-25 kg/ha is advised.

Uttarakhand

Amount of rainfall received over Uttarakhand is 9.7 mm (-78% large deficit) during 01 October 2020 - 03 December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11 - 17 December 2020) on rainfall over Uttarakhand is below normal for week-1 and above normal for week-2.

- Due to decrease in air temperature, farmers are advised to complete the sowing of *rabi* crops.
- Under prevailing weather condition, it is advised to provide light irrigation and use dry grass as mulch over basin in Mandarin orange and harvest the mature fruits.

Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 43.6 mm (-12% deficit) during 01 October 2020 - 03 December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11 - 17 December 2020) on rainfall over Himachal Pradesh is above normal for week-1 and week-2.

- Farmers are advised for mulching in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.
- Due to decrease in temperature, farmers are advised to protect the newly born calves and milch animals from cold and provide dry bedding to animals.

Gujarat

Amount of rainfall received over Gujarat is 10.6 mm (-63% large deficit) during 01 October 2020 - 03 December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11 - 17 December 2020) on rainfall over Gujarat is below normal for week-1 and above normal for week-2.

- For the management of fruit fly damage in guava, it is advised to spray solution mixture of 400 g jaggery + 10 ml Malathion 50 EC + 10 ml Dichlorvos 76 EC in 10 litres of water with large droplets on grasses on orchard boundaries and also on tree at evening time.

Punjab

Amount of rainfall received over Punjab is 12.3 mm (-15% deficit) during 01 October 2020 - 03

December 2020. The extended range weather forecast provided for next two weeks (04 - 10 December and 11- 17 December 2020) on rainfall over Punjab is below normal for week-1 and above normal for week-2.

- For management of loose smut of wheat, it is advised to treat 40 kg seed with Raxil Easy/Orius @13 ml/ 400 ml of water or Tebuseed or Seedex or Exzole @ 40 g or Vitavax power @120 g or Vitavax @ 80g.

Disclaimer:

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